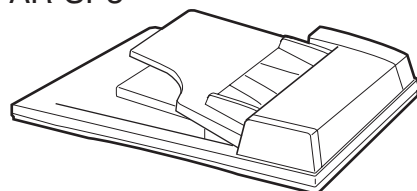


# SHARP SERVICE MANUAL

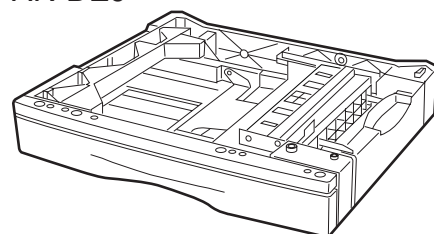
AR-SP3



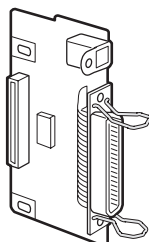
AR-FX3



AR-DE9



AR-PG1



CODE: 00ZAR15OPTA1E

## DIGITAL COPIER OPTIONS

**AR-SP3 (SPF)**
**AR-FX3 (FAX)**
**AR-DE9 (1 TRAY UNIT)**
**MODEL AR-PG1 (GDI + USB Kit)**

\* For the specifications, operational descriptions, circuit diagrams, and Parts Guide of the AR-FX3, refer to the AR-F151 Service Manual and Parts Guide.

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| ● PARTS GUIDE                              |       |

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

## [1] GENERAL

### 1. List of available options

| Option \ Model         | AR-150 | AR-155 | AR-F151 |
|------------------------|--------|--------|---------|
| AR-SP3 (SPF)           | ○ *1   | ×      | ×       |
| AR-FX3 (FAX)           | ○ *1   | ×      | ×       |
| AR-DE9 (1 TRAY UNIT)   | ○      | ○      | ×       |
| AR-PG1 (GDI + USB Kit) | ○      | ○      | ○       |

○ : Option available

× : Option not available

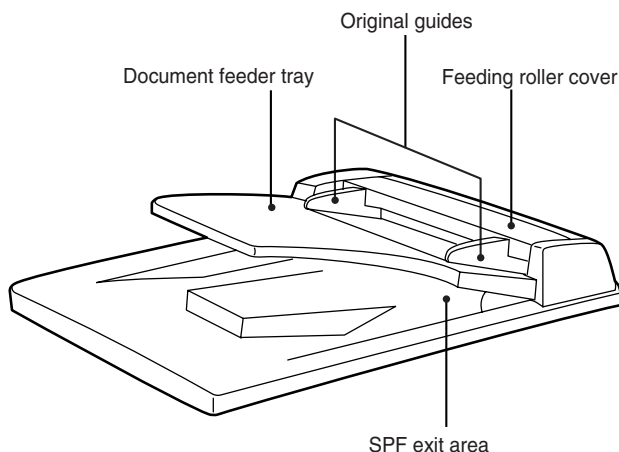
\*1: The option setup is provided in the models for Europe.  
FAX and SPF are incompatible.

### 2. Outline and specifications of each option

#### A. AR-SP3 (Single Pass Feeder)

The single pass feeder (SPF) holds up to 30 originals for automatic feeding.

##### Part names



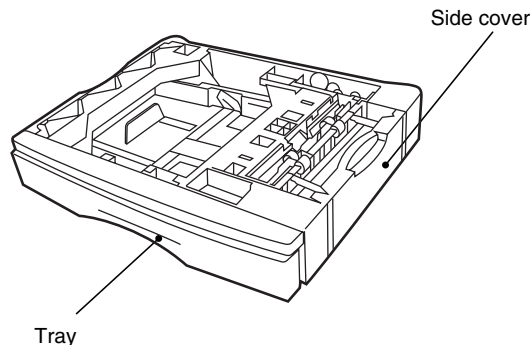
##### Specifications

|                      |                                                                          |
|----------------------|--------------------------------------------------------------------------|
| Acceptable originals | Weight: 14 to 23 lbs.                                                    |
|                      | Size: 5-1/2" × 8-1/2" to 8-1/2" × 14"                                    |
|                      | Capacity: Up to 30 sheets                                                |
| Power supply         | Drawn from the copier                                                    |
| Weight               | Approx. 6.6 lbs. (3kg)                                                   |
| Dimensions           | 19.6" (W) × 15" (D) × 4.3" (H)<br>(498 mm (W) × 380 mm (D) × 110 mm (H)) |

#### B AR-DE9 (250 - Sheet Paper Feed Unit)

The paper feed unit provides the convenience of increased paper capacity for the copier and a greater choice of paper sizes readily available for copying.

##### Part names



##### Specifications

|                 |                                                                           |
|-----------------|---------------------------------------------------------------------------|
| Copy paper size | 5-1/2" × 8-1/2" to 8-1/2" × 14"                                           |
| Paper weight    | 15 lbs. to 21 lbs.                                                        |
| Paper capacity  | One paper tray with capacity for 250 sheets of 21 lb. bond paper          |
| Weight          | Approx. 6.6 lbs. (3 kg)                                                   |
| Dimensions      | 19.6" (W) × 15.6" (D) × 3.5" (H)<br>(498 mm (W) × 395 mm (D) × 88 mm (H)) |
| Power supply    | Drawn from the copier                                                     |

#### C. AR-PG1 (GDI + USB Expansion Kit)

##### (1) MAIN FEATURES

###### a. Printing from Windows 3.1x, Windows 95, Windows 98\*, and Windows NT 4.0 applications

\* USB is supported on Windows 98 pre-installed only.

- High-speed and high-quality printing can be performed from Windows 3.1x, Windows 95, Windows 98, and Windows NT 4.0 applications through the SHARP GDI (Graphics Device Interface) system.
- Since print data is processed in the computer, waiting time during printing is short.

###### b. High-speed printing at 8 pages/min.

- First print time is approximately 9.6 seconds. (Excluding the communication time with PC)
- Print speed is 8 pages/min., when printing multiple pages.

##### (2) SPECIFICATIONS

|                              |                                                                                                                                            |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Resolution                   | 600 or 300 can be selected.                                                                                                                |
| Page description language    | SHARP GDI (Parallel)<br>SHARP GDI, USB (USB)                                                                                               |
| Page orientation             | Portrait or landscape                                                                                                                      |
| First print time             | Approx. 9.6 seconds*                                                                                                                       |
| Print speed (multiple pages) | Approx. 8 pages per minute (letter or A4) (Parallel)<br>Approx. 6 pages per minute (letter or A4) (USB)                                    |
| Interface port               | Bi-directional parallel interface (IEEE 1284 compliant) 2 m (6 feet) Max.<br>USB (B-type) interface (twisted pair cable) 2 m (6 feet) Max. |

\* First print time may differ depending on operating conditions, such as power-supply voltage and room temperature.  
Also the time may differ depending on data quantity to be printed and applications.

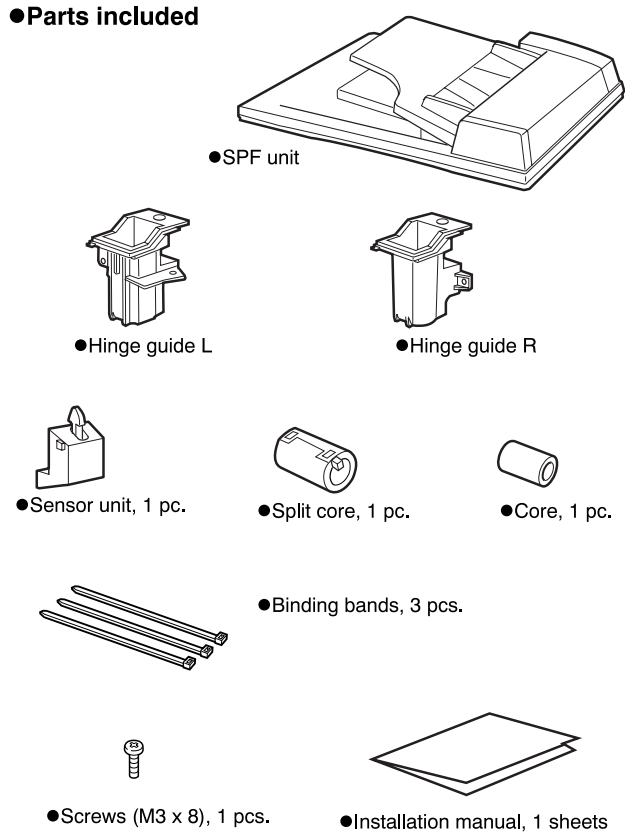
#### D. AR-FX3 (Facsimile Expansion Kit)

Refer to the AR-F151 Service Manual.

## [2] UNPACKING AND INSTALLATION

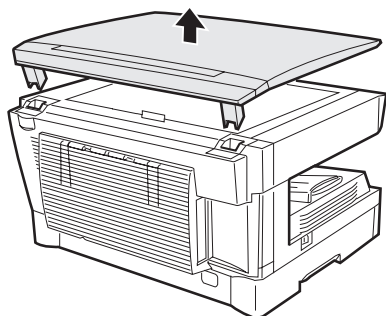
### 1. AR-SP3 Instalation Manual

#### ●Parts included

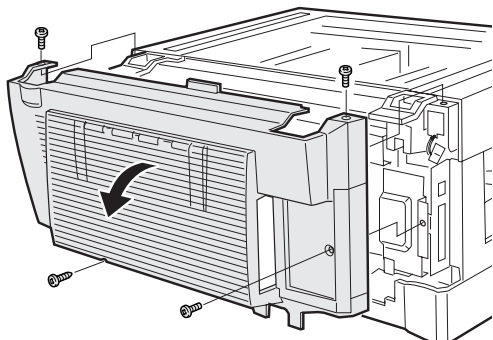


Turn the main switch to the "OFF" position and remove the power plug from the outlet.

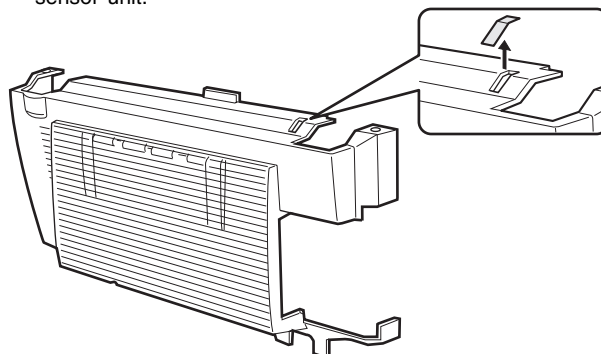
- 1) Remove the document cover.
  - Remove the document cover from the copier.



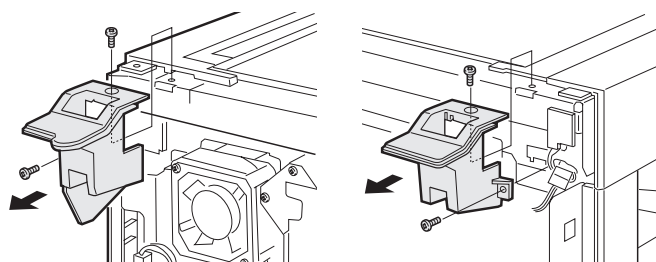
- 2) Remove the rear cabinet.
  - Remove the four screws and then remove the rear cabinet.



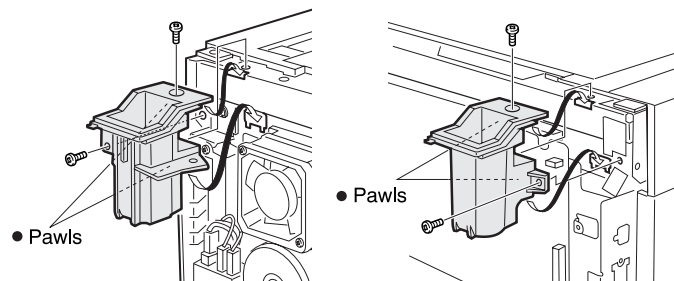
- 3) Remove the Mylar sheet from the rear cabinet.
  - Remove the Mylar sheet that covers the hole for the actuator of sensor unit.



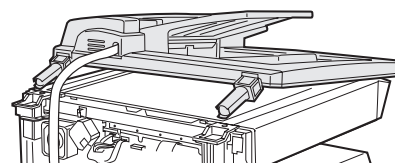
- 4) Remove the hinge guides L and R.
  - Remove the screws (two for each) and then remove the hinge guides L and R.



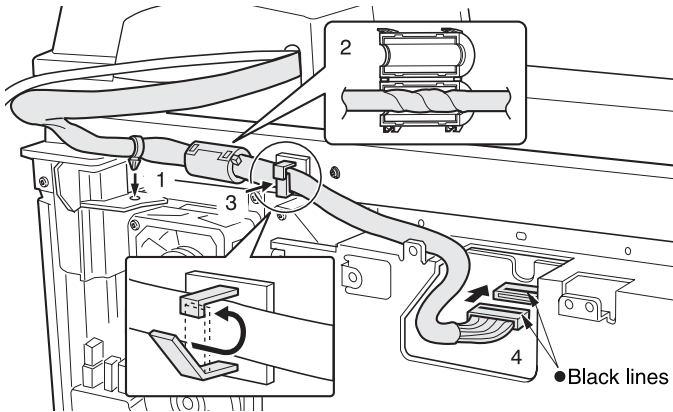
- 5) Attach the hinge guides L and R.
  - Attach the hinge guides L and R by fitting the pawls (two for each) into the frame of the copier and secure them with the two screws (M3 x 8) for each that have been removed in step 3.



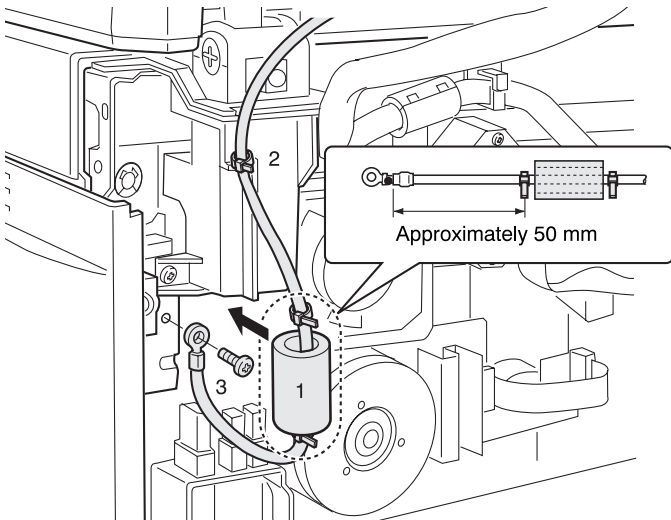
- 6) Place the SPF on the copier.



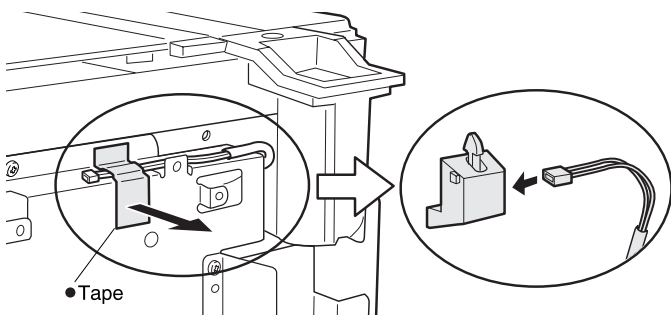
- 7) Connect the SPF with the copier using the relay harness.
- <1> Fit the snap band to the position shown in the illustration.
  - <2> Attach the core to the relay harness. At this time, take care on the core position and twist the harness two or three times.
  - <3> Secure the relay harness with the harness clamp.
  - <4> Connect the connector.
- (Connect the connectors by aligning the black lines.)



- 8) Attach the core to the ground wire and secure it.
- <1> Attach the core with two binding bands as shown in the illustration by taking care that the core is in the specified position.
  - <2> Secure the ground wire to the hinge guides with the binding bands.
  - <3> Secure the ground terminal to the frame of the copier with a screw (M3 × 10) and handle the wiring so that the core is under the hinge guides.

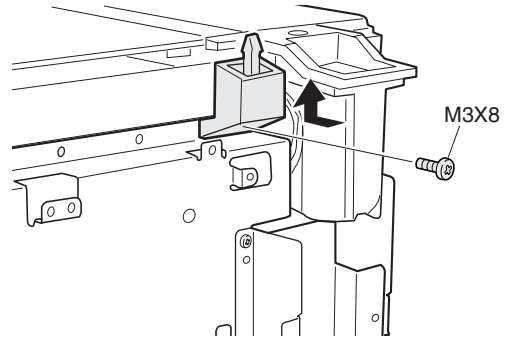


- 9) Remove the securing tape of the relay harness and connect the harness to the sensor unit.
- Remove the tape that secures the harness.
- Then connect the connector of the relay harness to the supplied sensor unit.



- 10) Attach the sensor unit.

- While pushing up the sensor unit fully, secure it to the PWB holder with a screw (M3 × 8).

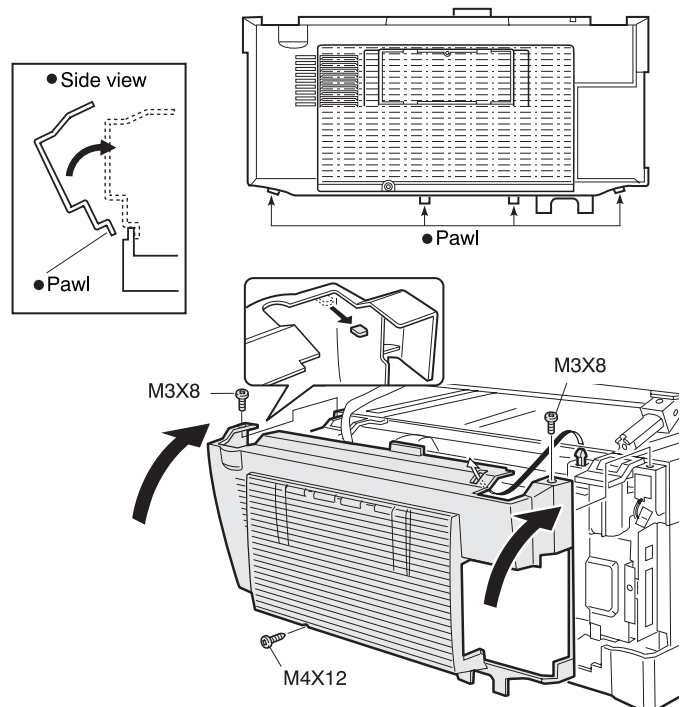


- 11) Attach the rear cabinet.

- Remove the rib from the rear cabinet.

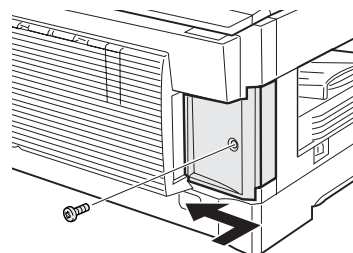
- <1> Hang the four pawls shown in the illustration below on the plate.
- <2> Push down the actuator of the sensor unit.
- <3> Position the cabinet to the upper screw positions.
- <4> Ensure that the actuator is inserted into the square hole of the cabinet.

Note: While pushing down the actuator of the sensor unit, attach the rear cabinet so that the actuator is inserted into the hole of the rear cabinet.

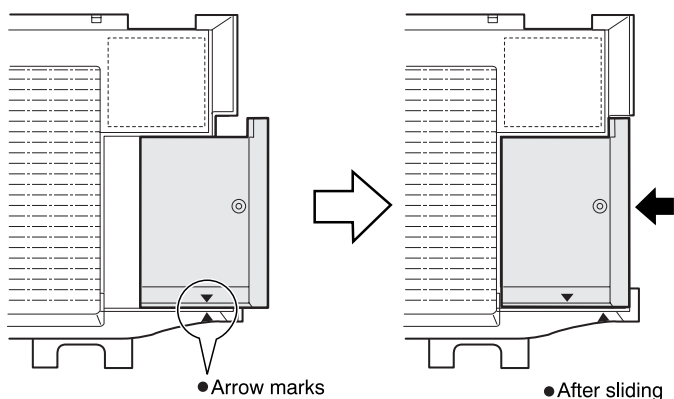


- 12) Attach the cover to the rear cabinet.

- <1> Align the arrow marks as shown in the illustration.
- <2> Then slide the cover to the left.
- <3> Secure the cover with a screw.

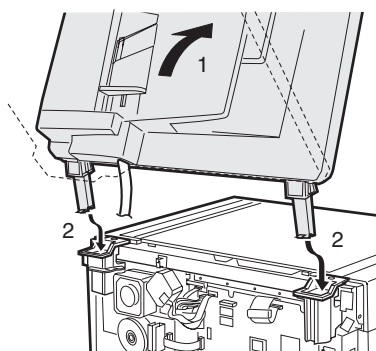


## 2. AR-FX3 Installation Manual



13) Attach the SPF to the copier.

- Attach the SPF by inserting the hinge guide sections of the SP3 into the hinge guides L and R.



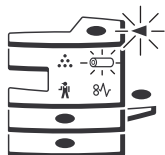
14) Insert the power plug into the outlet and turn the main switch of the copier to the "ON" position.

15) Perform SIM setting.

- Execute simulation [2] of [26] and enter [1].

16) Check the ON/OFF operation of the open detection sensor and book detection sensor.

- Execute simulation [2] of [2] and check that the indicator on the operation panel lights up and goes out by opening and closing the SPF. When the book detection sensor is turned ON/OFF, the drum replacement lamp is turned ON/OFF accordingly.

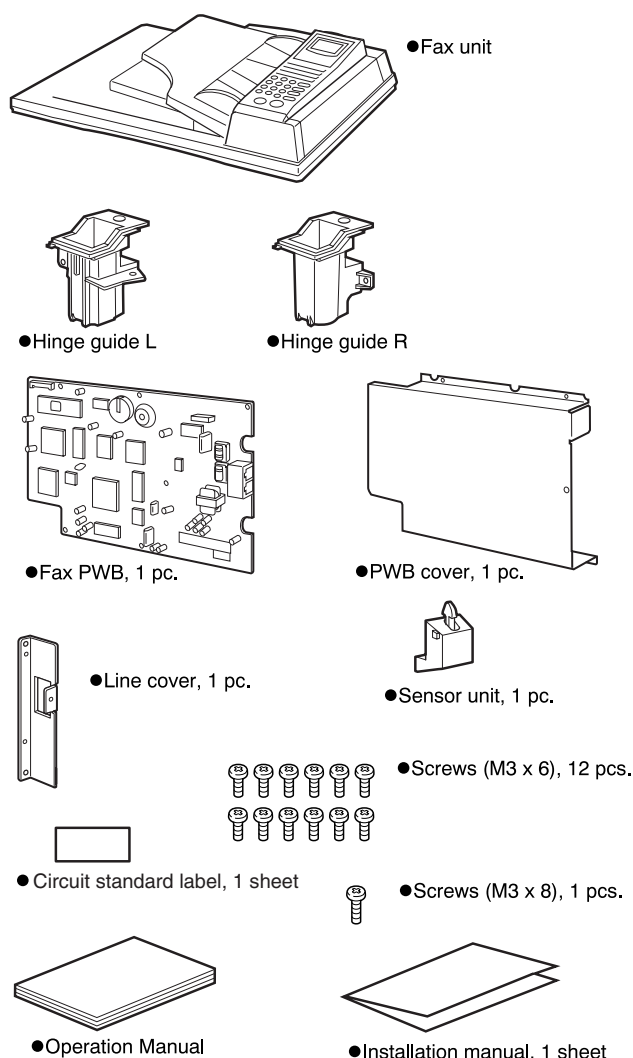


17) Check the copy ratio, and then check the center displacement and leading edge image void.

- Place an original on the document glass and make a copy. Then, place an original in the document feeder tray and make a copy.

If the center of the copy from the document glass is displaced from the copy from the document feeder, adjust the center referring to the service manual.

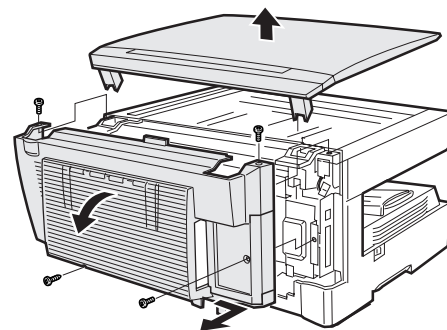
### ●Parts included



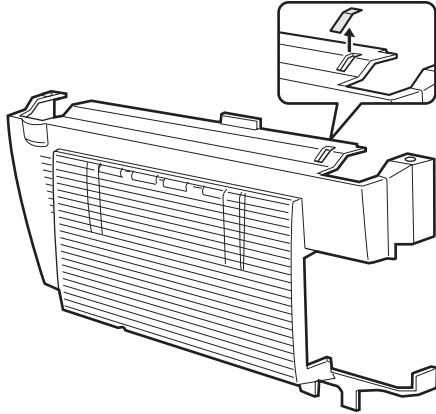
Turn the main switch to the "OFF" position and remove the power plug from the outlet.

1) Remove the document cover and the rear cabinet.

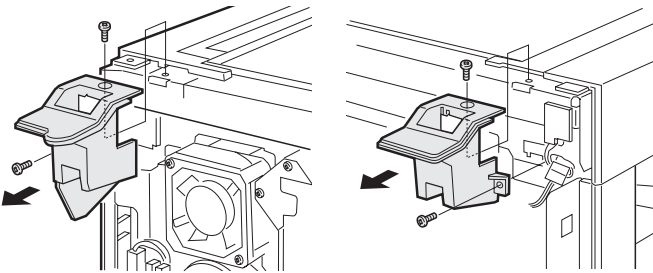
- After removing the document cover, remove the four screws and then remove the rear cabinet.



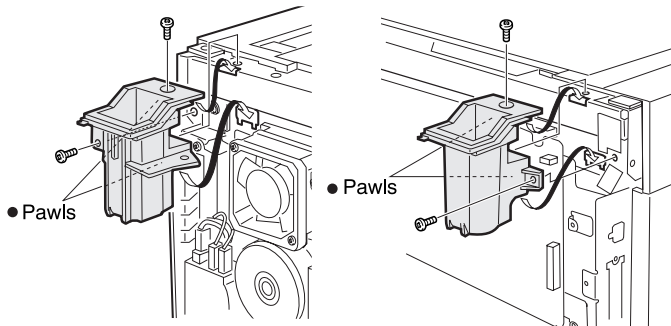
- 2) Remove the Mylar sheet from the rear cabinet.
- Remove the Mylar sheet that covers the hole for the actuator of sensor unit.



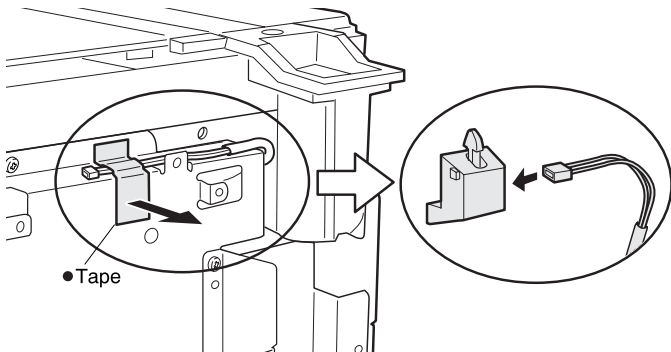
- 3) Remove the hinge guides L and R.
- Remove the screws (two for each) and then remove the hinge guides L and R.



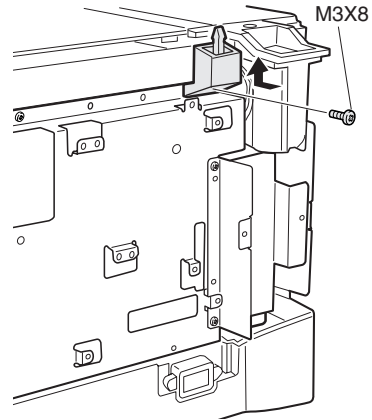
- 4) Attach the hinge guides L and R.
- Attach the hinge guides L and R by fitting the pawls (two for each) into the frame of the copier and secure them with the two screws (M3 × 8) for each that have been removed in step 2.



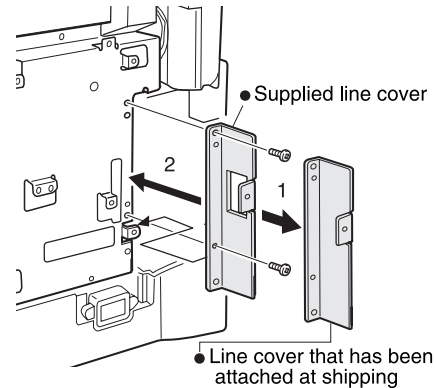
- 5) Remove the securing tape of the relay harness and connect the harness to the sensor unit.
- Remove the tape that secures the harness. Then connect the connector of the relay harness to the supplied sensor unit.



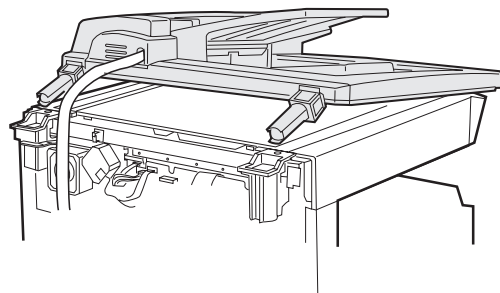
- 6) Attach the sensor unit.
- While pushing up the sensor unit fully, secure it to the PWB holder with a screw (M3 × 8).



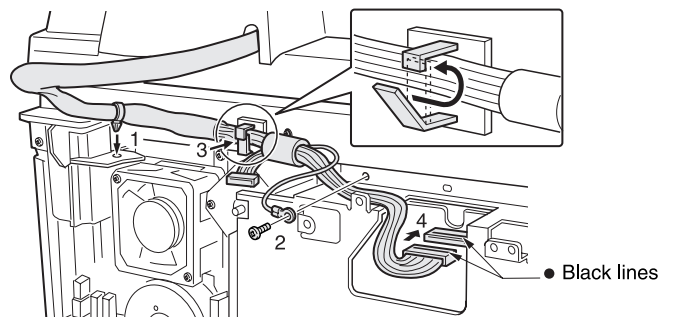
- 7) Replace the line cover.
- Remove the two screws, replace the line cover that has been attached at shipping with the supplied line cover, and secure it with the two screws.



- 8) Place the SPF on the copier.



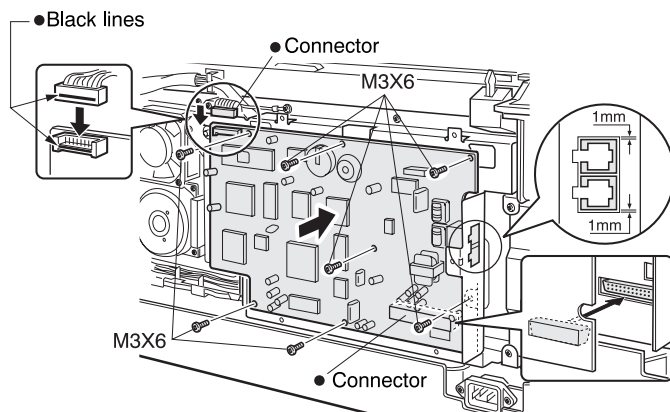
- 9) Connect the SPF to the copier with the SPF relay harness.
- <1> Fit the snap band to the position shown in the illustration.
  - <2> Remove the screw that secures the PWB holder and tighten the ground wire together with the PWB holder.
  - <3> Secure the relay harness with the harness clamp.
  - <4> Connect the connector. (Connect the connectors by aligning the black lines.)



## 10) Attach the fax PWB.

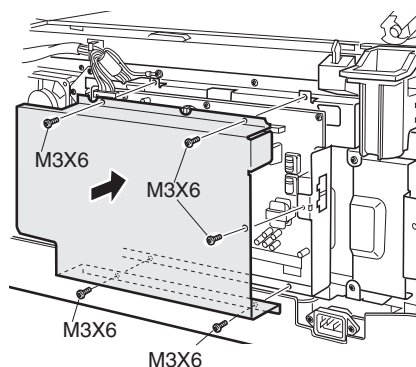
- While ensuring that the connector of the fax PWB is securely connected to that of the copier, attach the fax PWB to the PWB cover with seven screws (M3 × 6) and connect the relay harness connector.

Connect the relay harness to the connector of the fax PWB.  
(Connect the connectors by aligning the black lines.)



## 11) Attach the PWB cover.

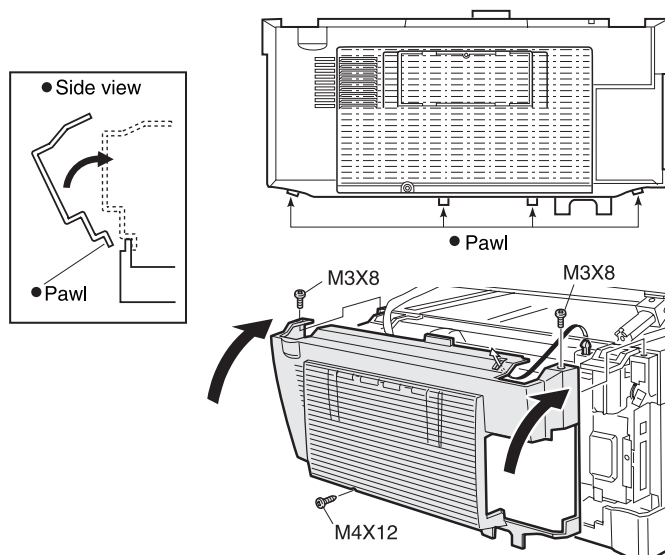
- Attach the supplied PWB cover with five screws (M3 × 6).



## 12) Attach the rear cabinet.

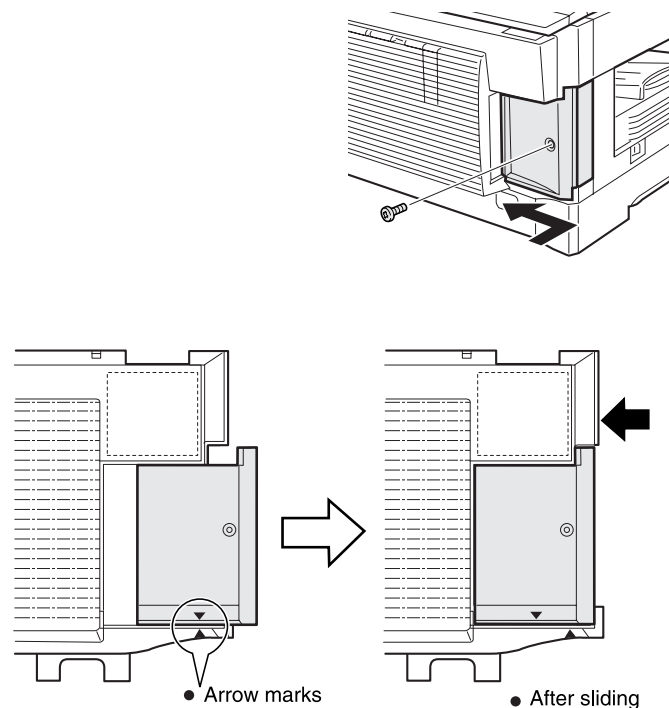
- <1> Hang the four pawls shown in the illustration below on the plate.
- <2> Push down the actuator of the sensor unit.
- <3> Position the cabinet to the upper screw positions.
- <4> Ensure that the actuator is inserted into the square hole of the cabinet.

Note: While pushing down the actuator of the sensor unit, attach the rear cabinet so that the actuator is inserted into the hole of the rear cabinet.



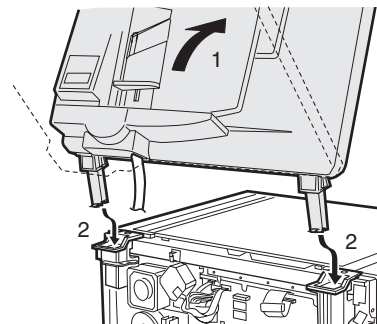
## 13) Attach the cover to the rear cabinet.

- <1> Align the arrow marks as shown in the illustration.
- <2> Then slide the cover to the left.
- <3> Secure the cover with a screw.



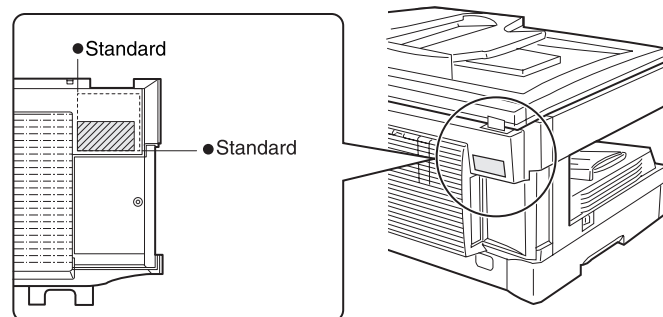
## 14) Attach the SPF to the copier.

- Attach the SPF by inserting the hinge guide sections of the FX3 into the hinge guides L and R.



## 15) Stick the label to the rear cabinet.

- After installing the FAX expansion kit in the machine, please put the registration label, packed with the kit, on the prescribed location.



\* For the details, refer to the AR-FX3 Installation Manual.

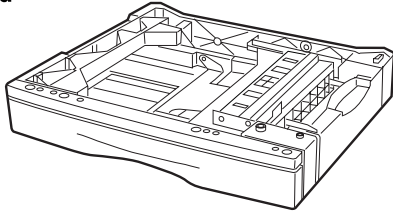
- 16) Insert the power plug into the outlet and turn the main switch of the copier to the "ON" position.
- 17) Perform SIM setting.  
Execute simulation [2] of [26] and enter [1].
- 18) Check the ON/OFF operation of the open detection sensor and book detection sensor.
  - Execute simulation [2] of [2] and check that the indicator on the operation panel lights up and goes out by opening and closing the FAX-SPF. When the book detection sensor is turned ON/OFF, the drum replacement lamp is turned ON/OFF accordingly.



- 19) Check the copy ratio, and then check the center displacement and leading edge image void.
  - Place an original on the document glass and make a copy. Then, place an original in the document feeder tray and make a copy. If the center of the copy from the document glass is displaced from the copy from the document feeder, adjust the center referring to the service manual.

### 3. AR-DE9 Installation Manual

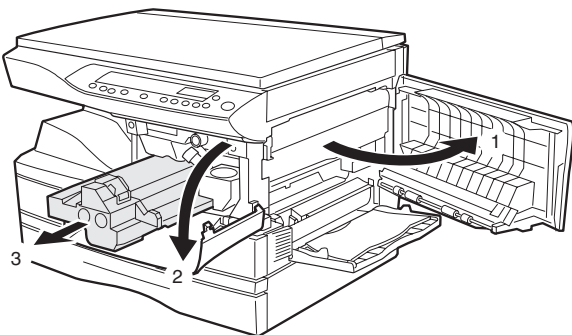
#### ●Parts included



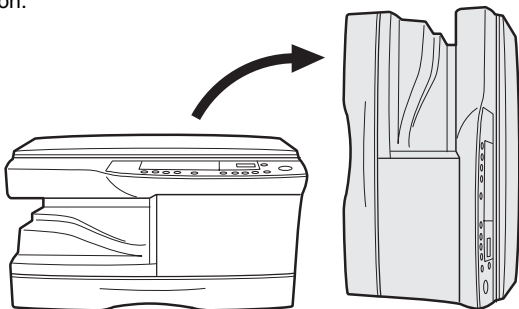
●Screws (M4 x 16), 4 pcs.

Turn the main switch to the "OFF" position and remove the power plug from the outlet.

- 1) Remove the DV cartridge from the copier.
  - Open the bypass tray, side cover, and front cover, and then remove the DV cartridge.

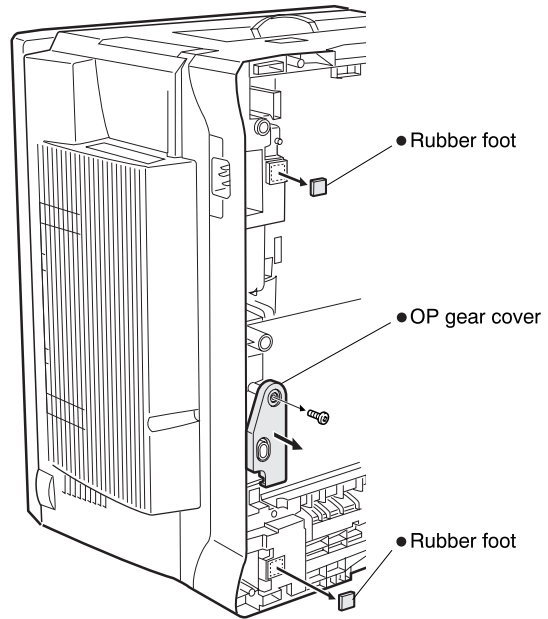


- 2) Make the copier upright.
  - Close the front cover, side cover, and bypass tray, and then make the copier upright in the orientation shown in the illustration.

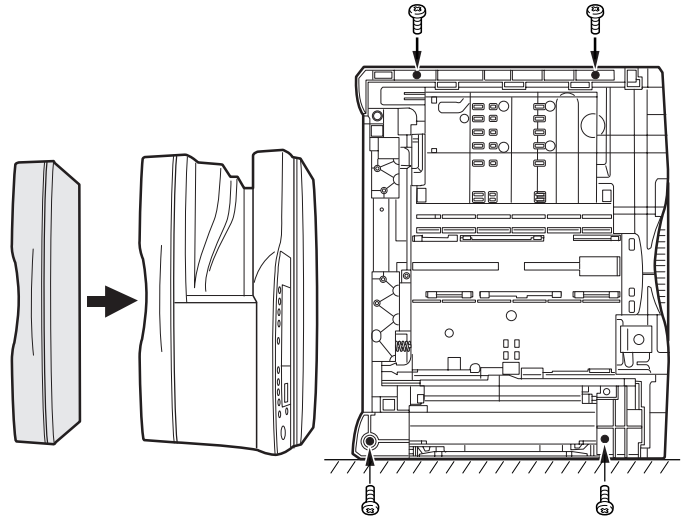


- 3) Remove the OP gear cover and rubber feet from the bottom of the copier.

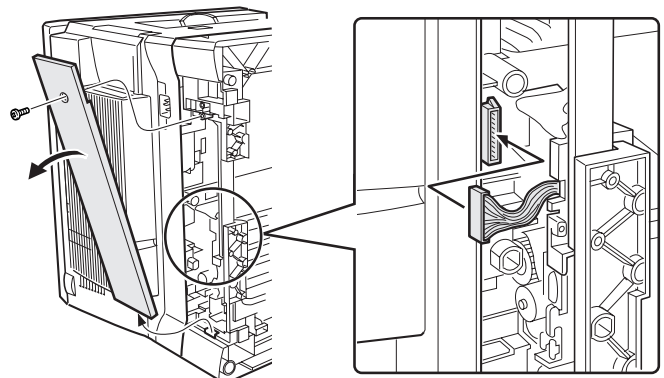
- Remove the screw and remove the OP gear cover. Then, take off and remove the rubber feet.



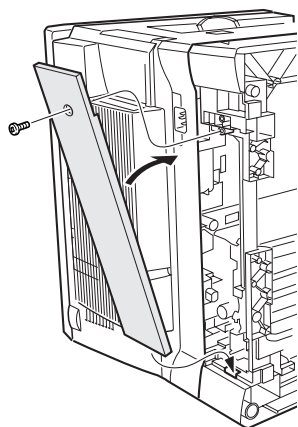
- 4) Install the second cassette unit to the copier.
  - If the second cassette unit is aligned to the copier, it can be positioned automatically. Hold the copier lightly to prevent it from toppling down and secure the second cassette unit with four screws (M4 x 16).



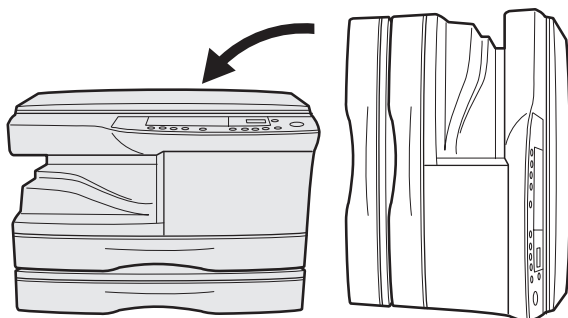
- 5) Remove the rear cover and connect the connector.
  - Remove the screw and remove the rear cover. Then, connect the connector of the second cassette unit to that of the copier.



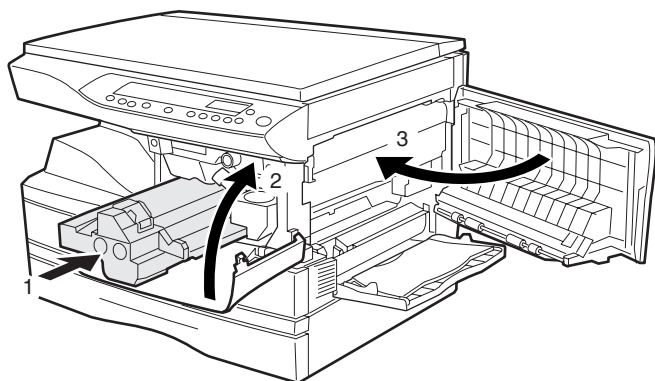
- 6) Attach the rear cover.
- Attach the rear cover to its original position and secure it with the screw (M4 × 12).



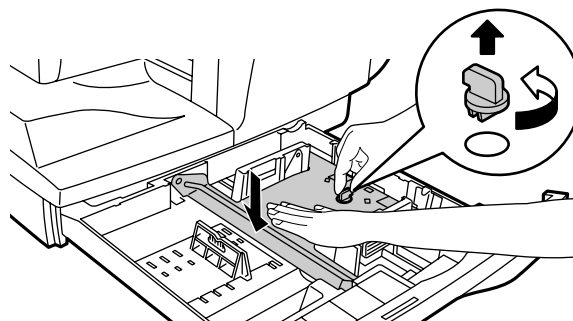
- 7) Return the copier to the normal orientation.
- When returning the copier to the normal orientation, gently return it without giving a shock.



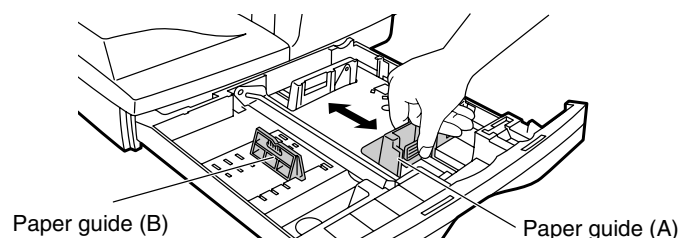
- 8) Insert the DV cartridge into the copier.
- Open the bypass tray, side cover, and front cover, and insert the DV cartridge. Then, close the front cover, side cover, and bypass tray.



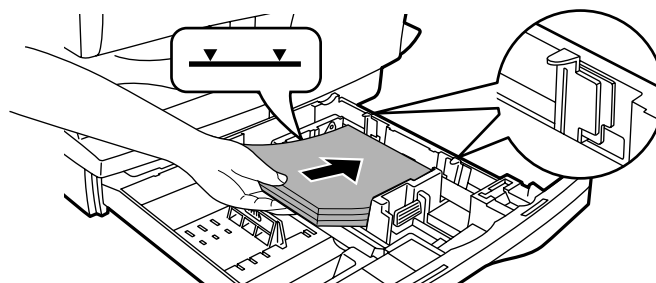
- 9) Remove the paper tray lock for packing.
- Remove the paper tray lock for packing that secures the turning plate in the paper tray by rotating it in the direction of the arrow and store it in the specified position.



- 10) Set the paper tray side guide.
- Squeeze the lever of the paper tray side guide to slide the guide to the position for the paper size to be used.



- 11) Load paper into the paper tray.
- When loading paper, do not exceed the maximum height line.

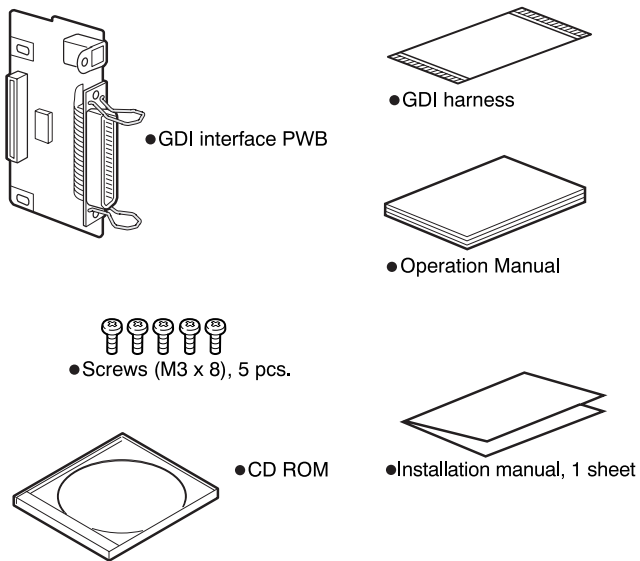


- 12) Remove the optical locking screw and fusing unit packing lever so that the copier is ready.
- 13) Insert the power plug into the outlet and turn the main switch to the "ON" position. Then, perform the following procedure.
- 14) Perform SIM setting.
- Execute simulation [3] of [26] and enter [1].
- 15) Check the center displacement.
- Place an original on the document glass and make a copy using the tray in the copier. Then, make a copy using the tray in the installed optional paper feed unit. If the center of the copy from the optional paper feed unit is displaced from the copy from the tray in the copier, adjust the center referring to the service manual.

## 4. AR-PG1

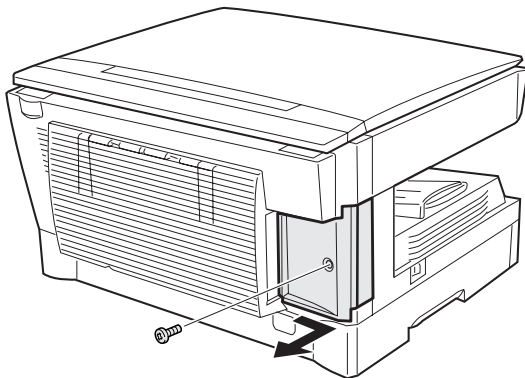
### A. Installation Manual

#### ●Parts included

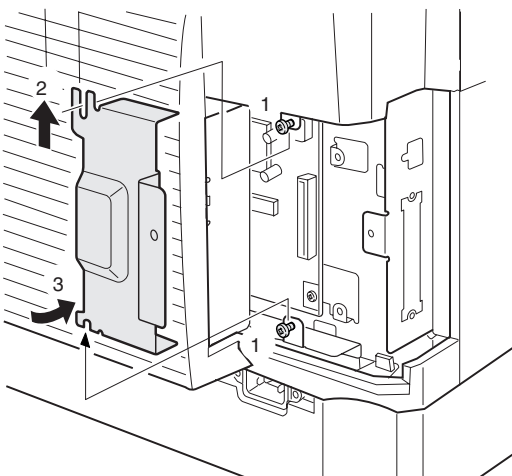


Turn the main switch to the "OFF" position and remove the power plug from the outlet.

- 1) Remove the cover of the rear cabinet.
  - Remove the screw, slide the cover in the direction indicated by the arrow, and remove the cover of the rear cabinet.

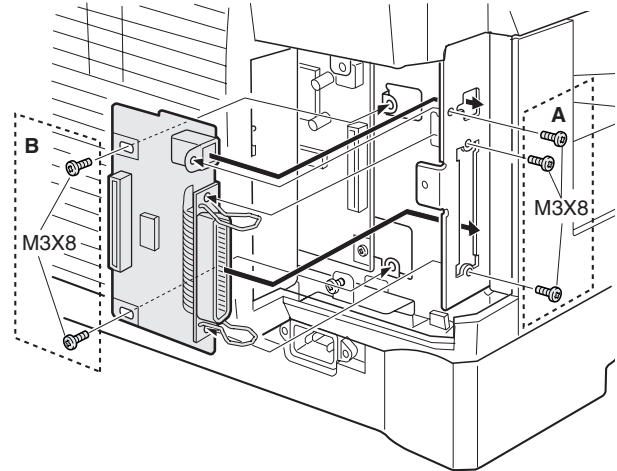


- 2) Remove the PWB cover.
  - <1> Loosen the screws that secure the PWB cover.
  - <2> Push up the PWB cover and
  - <3> Rotate it counterclockwise to remove it.



- 3) Attach the GDI interface PWB.

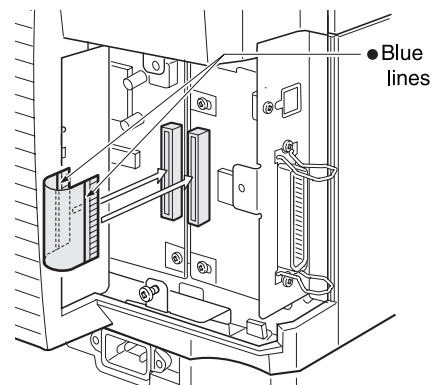
- Fit the connector of the GDI PWB into the mounting position of the copier, secure the side A with three screws, and then secure the front B with two screws.



- 4) Attach the GDI harness.

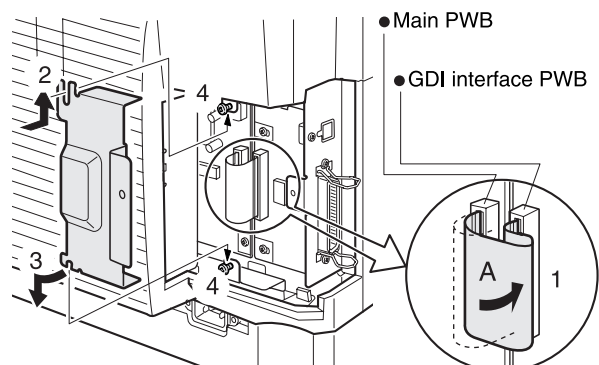
- Attach the GDI harness so that the blue lines face forward and also face toward the GDI interface side.

Note: Be careful about the direction of the blue lines.



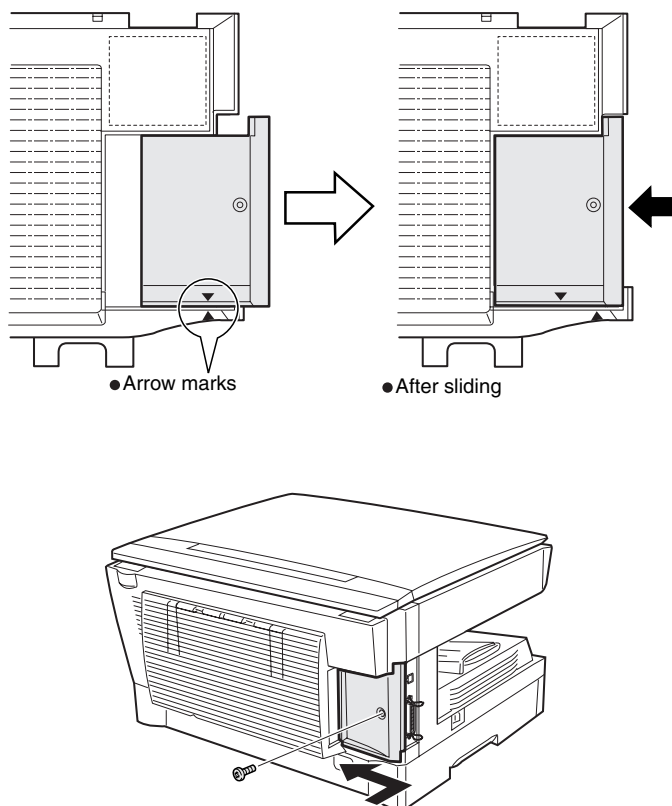
- 5) Attach the PWB cover.

- <1> Before attaching the PWB cover, hold down the GDI harness in the direction A in the illustration below.
- <2> Fit the upper part of the PWB cover to the upper screw that has been loosened in step 2 above.
- <3> While rotating the lower part of the PWB cover clockwise, fit it to the lower screw.
- <4> Tighten the upper and lower screws to secure the cover.



## 6) Attach the rear cover.

- Align the arrow marks as shown in the illustration and then slide the cover to the left. Then, secure the cover with a screw.



## B. Installing the printer driver software

### (1) Description of the printer driver

The printer driver is the software program which runs the printer. It converts the data in your file into information that the printer can understand. It also controls communication between the printer and computer as the data is printed.

### (2) Checking the hardware and software requirements

You will need the following hardware and software in order to install the printer driver.

|                      |                                                                                                                                                                       |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Computer type        | IBM PC/AT or compatible computer equipped with a bi-directional parallel or USB interface, and CD-ROM drive                                                           |
| Windows type         | Windows 3.1x, Windows 95, Windows 98*, Windows NT 4.0<br>* USB is supported on Windows 98 preinstalled only.                                                          |
| CPU                  | 486DX 66 MHz or better                                                                                                                                                |
| Physical RAM         | Windows 95, Windows 3.1x: 8MB (16MB or more is recommended.)<br>Windows NT4.0: 12MB (16MB or more is recommended.)<br>Windows 98: 16MB (32MB or more is recommended.) |
| Display              | 640 × 480 dots (VGA) or better                                                                                                                                        |
| Hard disk free space | 10 MB or more                                                                                                                                                         |

**Caution:** The printer driver included in this product cannot be used under Windows NT3.5x, OS/2, pure MS-DOS and other operating systems which are not described above.

### (3) Installing the printer driver

The software for your printer is provided on CD-ROM.

Before installing the printer driver, be sure to check the following items.

- Is the printer connected properly to the computer?
- Does the printer have paper?
- Is there another GDI printer driver or Windows Printing System printer driver already installed? If installed, change the printer port setting. To change the printer port settings.

In this description, the following drive configuration is presumed. Specify proper drives depending on the configuration of your computer.

Drive R: CD-ROM drive (installation source). If necessary, replace R with the letter of your CD-ROM drive.

Drive C: Hard disk drive (installation destination). If necessary, replace C with the letter of your hard disk drive.

#### a. Windows 95/Windows NT 4.0 Installation Instructions:

With both the computer and the printer turned off, connect the printer to the computer with a parallel interface cable.

- Load paper into the paper tray of the printer. For instructions on loading paper, see the section LOADING COPY PAPER in the copier operation manual.
- Turn on the printer.
- Turn on your computer and start Windows.
- When using Windows 95 on a personal computer with plug & play\*, the "Update Device Driver Wizard" window will appear. Insert the installation CD-ROM into the CD-ROM drive. Click the Next button and follow the on-screen instructions. Proceed to step 7. If the "Copying Files" window appears during this operation, enter R:\ (if the CD-ROM is designated as drive R) and click the OK button.

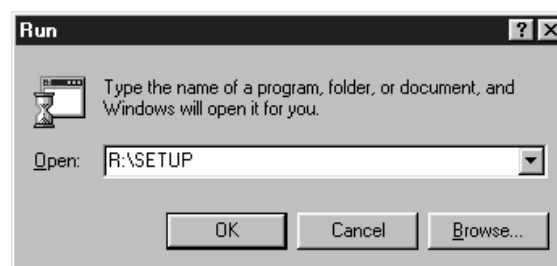


- If you use Windows 95 and the "New Hardware Found" window will appear, click the Driver from Disk Provided by Hardware Manufacturer button and then click OK. Proceed to step 6.
- If you use Windows 95 and the screen shown above or the "New Hardware Found" window does not appear, proceed to step 5.
- If you use Windows NT 4.0, proceed to step 5.

#### \* Plug & play

This feature is effective if both the computer and peripheral equipment are equipped with IEEE 1284 compliant parallel interface.

- Insert the installation CD-ROM into the CD-ROM drive. Click the Start button and select Run. When the screen shown below appears, type R:\SETUP (if the CD-ROM is designated as drive R) and click the OK button. Proceed to step 7.



- 6) "Install from Disk" window will appear. Insert the installation CD-ROM into the CD-ROM drive. Type R:\ (if the CD-ROM is designated as drive R) and click the OK button. Proceed to step 7.



- 7) The installation program will start. To install the printer driver to the default folder, click the Next button. To select a different folder, select Browse or type in the new path and folder name. Click OK and say YES to create the folder, select the Next button to continue.
- 8) On the display, you will see "printer port to be used". Normally, this is LPT1 and it is selected automatically. Ensure that Yes is checked to use the printer as the default printer. Finally click the Next button.
- 9) A "Confirm installation" window will be displayed. To continue installation, click the Yes button.
- 10) When the installation is complete, you will be asked whether or not to print a test page. If you wish to do so, click the Yes button. At this time, ensure that paper is loaded in the paper tray.
- 11) If the test print completes successfully, click the Finish button. "The installation of the SHARP AR-150 Series Software is complete." window will be displayed. Click the OK button.

#### b. Windows 98:

With both the computer and the printer turned off, connect the printer to the computer with either a parallel or a USB interface cable.

- 1) Load paper into the paper tray of the printer. For instructions on loading paper, see the section LOADING COPY PAPER found in the copier operation manual.
- 2) Turn on the printer.
- 3) Turn on your computer and start Windows.

When using the USB interface:

- Connect your personal computer and the printer using a USB interface cable if you have not already done so.
- When the "Add New Hardware Wizard" window appears, insert the installation CD-ROM, click the Next button, follow the on-screen instructions, and finally click the Finish button.



- 4) When using Windows 98 on a personal computer with plug & play\*, the "Add New Hardware Wizard" window will appear. Click the Next button and follow the on-screen instructions.

- If the "Add New Hardware Wizard" window does not appear, proceed to step 8.

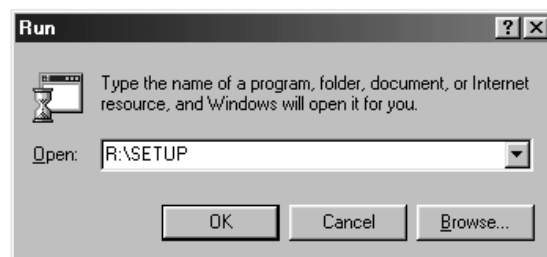
\* Plug & play: For plug & play information



- 5) Select Search for the best driver for your device and click the Next button.
- 6) Insert the installation CD-ROM into the CD-ROM drive. (If you are using the USB interface, confirm that the installation CD-ROM is in the CD-ROM drive.) Select the CD-ROM drive and click the Next button.



- 7) Windows driver file search will find the device "SHARP AR-150 Series". Click the Next button. Proceed to step 9.
- 8) Insert the installation CD-ROM into the CD-ROM drive. (If you are using the USB interface, confirm that the installation CD-ROM is in the CD-ROM drive.) Click the Start button and select Run. When the window shown below appears, type R:\SETUP (if the CD-ROM is designated as drive R) and click the OK button. Proceed to step 9.

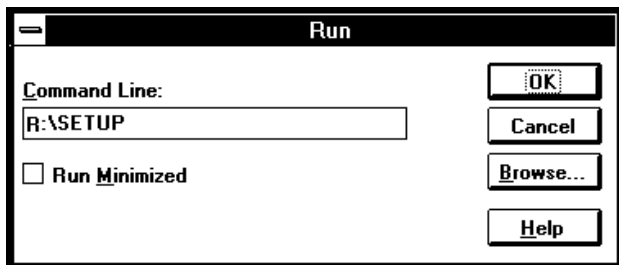


- 9) The installation program will start. To select a different folder, select Browse and type in the path and folder name where the printer driver will be installed. Click OK and say YES to create the folder, select the Next button to continue. To install the printer driver to the default folder, click the Next button.
- 10) On the display you will see "printer port to be used". The printer port is selected automatically. If you are using the parallel interface, this is LPT1. If you are using the USB interface, this is LPT/USB1. Ensure that Yes is checked to use the printer as the default printer. Finally click the Next button.
- 11) A "Confirm installation" window will be displayed. To continue installation, click the Yes button.
- 12) When the installation is complete, you will be asked whether or not to print a test page. If you wish to do so, click the Yes button. At this time, ensure that paper is loaded in the paper tray.
- 13) If the test print completes successfully, click the Finish button. "The installation of the SHARP AR-150 Series Software is complete." window will be displayed. Click the OK button.

#### c. Windows 3.1x:

With both the computer and the printer turned off, connect the printer to the computer with a parallel interface cable.

- 1) Load paper into the paper tray of the printer. For instructions on loading paper, see the section LOADING COPY PAPER in the copier operation manual.
- 2) Turn on the printer and then start Windows on your computer.
- 3) Insert the installation CD-ROM into a CD-ROM drive.
- 4) Choose File from the Menu bar in Program Manager, and then choose the Run... command.
- 5) Type R:\SETUP (if the CD-ROM is designated as drive R) in the command line box and then click the OK button.



- 6) Select a directory to which the printer driver will be installed and click the Next button. To install it to the default directory, click the Next button.
- 7) A "printer port to be used" window will be displayed. Normally, LPT1 is automatically set. Then ensure that Yes is checked to use this printer as the default printer.
- 8) A "Confirm installation" window will be displayed. To continue installation, click Yes.
- 9) When the installation is complete, restart Windows.

#### (4) AR-150 Series printer driver group

When the printer driver is installed, the SHARP AR-150 Series printer driver group will be created. This group of software programs provides the following functions:

#### a. Uninstall AR-150 Series

The printer driver can be uninstalled. If the driver is uninstalled, printing can no longer be performed on the printer.

For proper uninstallation, be sure to use the SHARP uninstall program of the printer driver group.

##### Readme

The latest information on the printer driver is included in this document. Read the Readme first.

##### Advanced Settings

See help for Advanced Settings.

##### Status Monitor

The Status Monitor window provides visual information about the printer state and current job.

##### DOS Emulation Setup

##### Status Monitor HELP

Assistance and information for Status Monitor.

##### DOS Emulation HELP

Assistance and information for DOS Emulation support.

##### Advanced Settings HELP

Assistance and information for Advanced Settings.

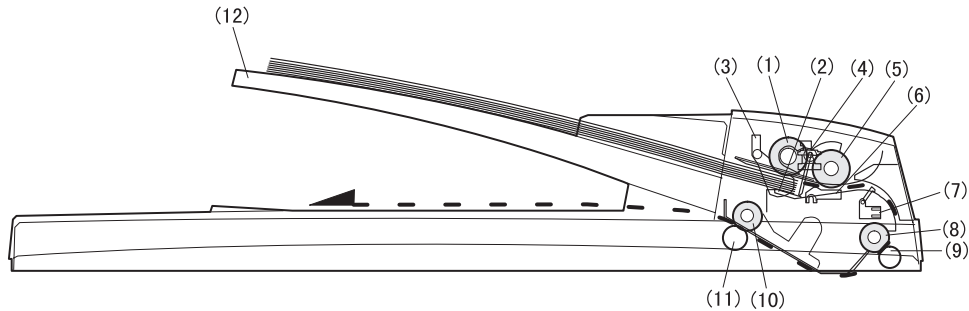
### [3] AR-SP3

## 1. Operational descriptions

### A. Outline

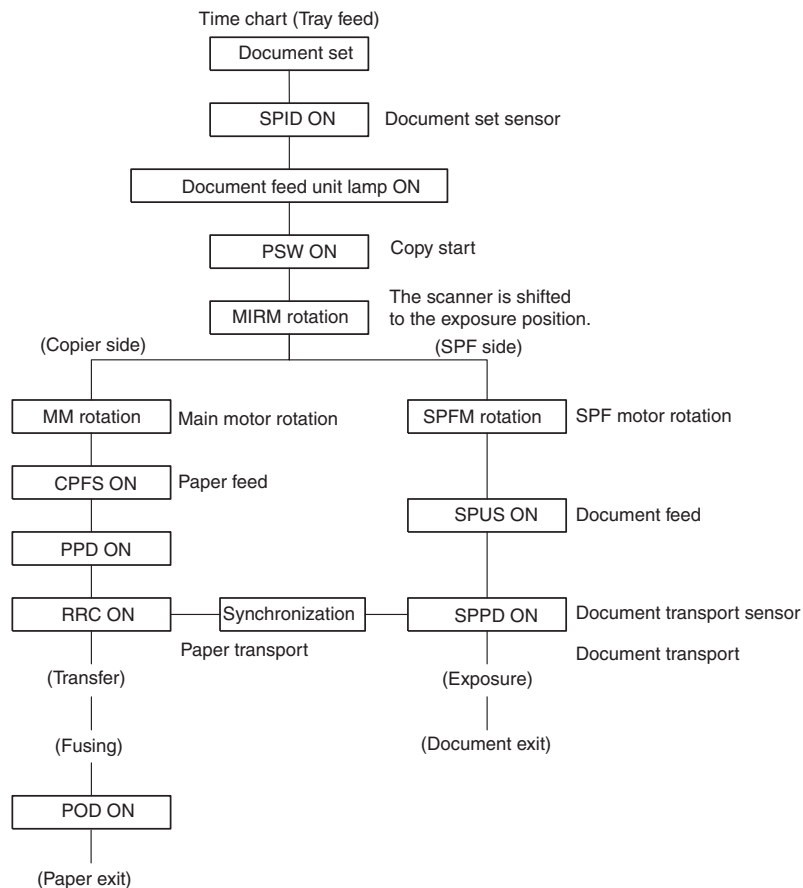
The SPF (Single Path Feeder) is installed to the AL-1000/1200 as a standard provision, and it automatically copies up to 30 sheets of documents of a same size. (Only one set of copies)

### B. Document transport path and basic composition

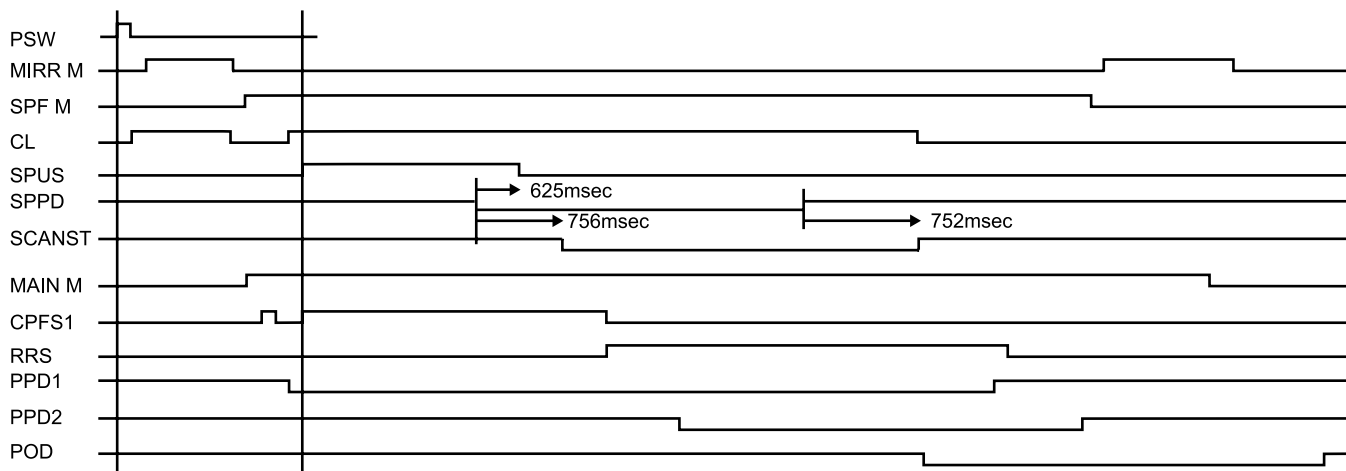


|      |                    |      |                                  |      |                           |
|------|--------------------|------|----------------------------------|------|---------------------------|
| (1)  | Pickup roller      | (2)  | Sheet of document for paper feed | (3)  | Set detection ACT         |
| (4)  | Paper stopper      | (5)  | Document feed roller             | (6)  | Separation sheet          |
| (7)  | Paper entry sensor | (8)  | PS roller D                      | (9)  | Transport follower roller |
| (10) | Paper exit roller  | (11) | Paper exit follower roller       | (12) | Document tray             |

### C. Operational descriptions



In the zooming mode, the magnification ratio in the sub scanning direction (paper transport direction) is adjusted by changing the document transport speed.



## D. Cases where a document jam is caused

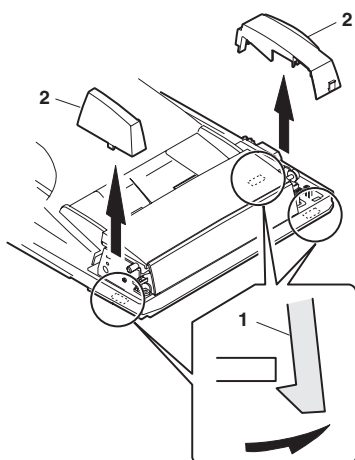
- When SPPD is ON (document remaining) when the power is turned on.
- When SPPD is not turned ON within about 1.5 sec (at 100% copy) after starting the document feed operation.
- When SPPD is not turned on within about 4.7 sec (at 100% copy) after turning on SPPD.
- When the SPF document jam release door or the OC cover is opened during document transport (SPF motor rotating).

## 2. Disassembly and assembly

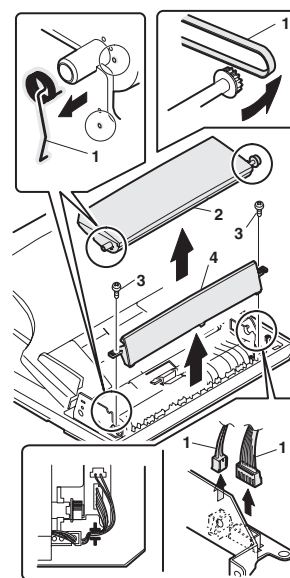
| No. | Part name Ref.                          |
|-----|-----------------------------------------|
| A   | Sensor PWB                              |
| B   | Pickup solenoid                         |
| C   | Clutch                                  |
| D   | Manual paper feed roller, pickup roller |
| E   | Belt                                    |
| F   | SPF motor                               |
| G   | Paper entry sensor                      |
| H   | PS roller                               |
| I   | Paper exit roller                       |

### Pickup unit removal

- Remove three fixing pawls from the bottom of the machine.
- Remove the front cover and the rear cover.



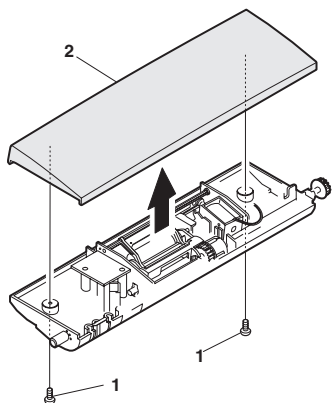
- Remove the belt, the paper feed frame SP, and two harnesses.
- Remove the pickup unit.



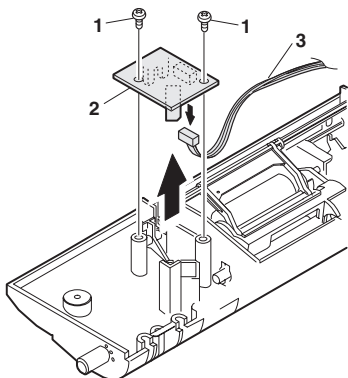
\* When installing the parts, be careful of the hole position of the paper frame SP.

**A. Sensor PWB**

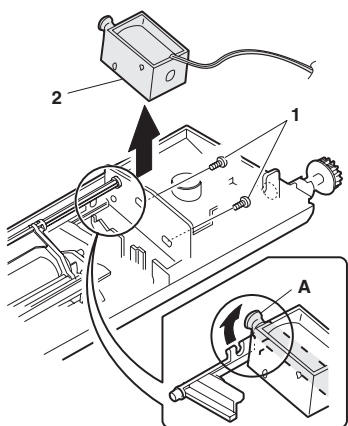
- 1) Remove two screws from the bottom of the pickup unit.
- 2) Remove the upper cover.



- 1) Remove two screws.
- 2) Remove the sensor PWB.
- 3) Remove the harness.

**B. Pickup solenoid**

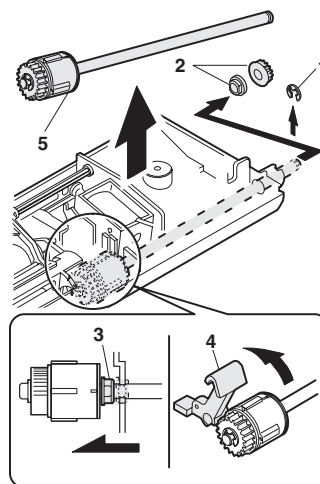
- 1) Remove two screws.
- 2) Remove the pickup solenoid



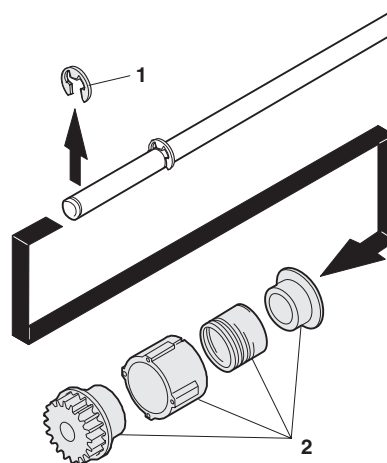
\* When installing, hang iron core A on the solenoid arm.

**C. Clutch**

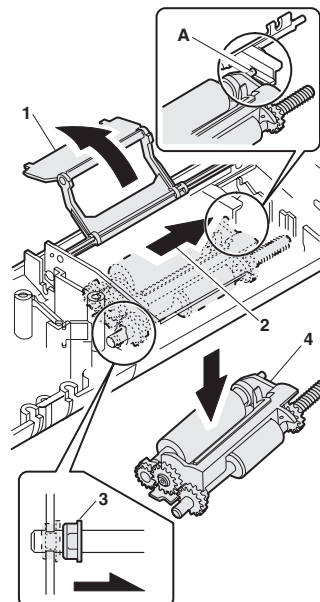
- 1) Remove the E-ring.
- 2) Remove the pulley and bush.
- 3) Slide the bush in the arrow direction.
- 4) Lift the clutch, and 5) remove the clutch.



- 1) Remove the E-ring.
- 2) Remove the parts.

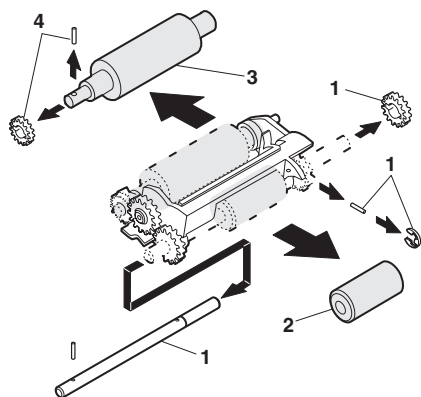
**D. Manual paper feed roller, pickup roller**

- 1) Lift the paper stopper.
- 2) Slide the takeup roller unit.
- 3) Slide the bush in the arrow direction.
- 4) Remove the takeup roller unit.



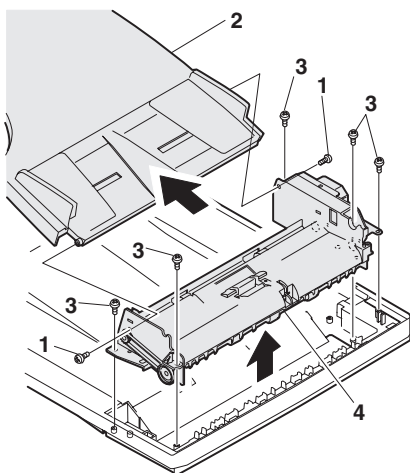
\* When installing the takeup roller, hang the projection of the takeup roller unit on the solenoid arm.

- 1) Remove the parts.
- 2) Remove the manual paper feed roller.
- 3) Remove the pickup roller.
- 4) Remove the parts.



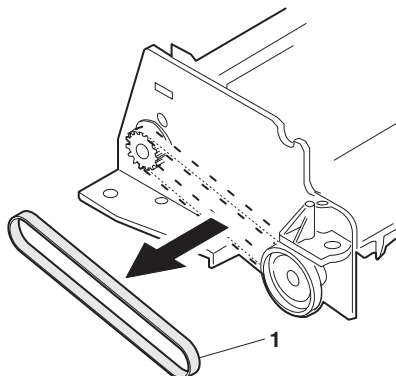
#### Transport unit removal

- 1) Remove two screws.
- 2) Remove the document tray unit.
- 3) Remove five screws.
- 4) Remove the transport unit.



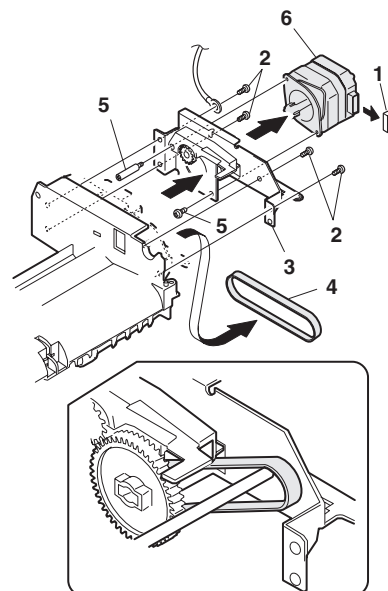
#### E. Belt

- 1) Remove the belt.



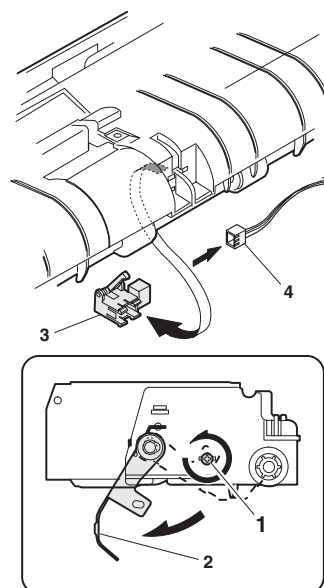
#### F. SPF motor

- 1) Remove the harness.
- 2) Remove four screws.
- 3) Remove the drive unit.
- 4) Remove the belt.
- 5) Remove two screws.
- 6) Remove the SPF motor.



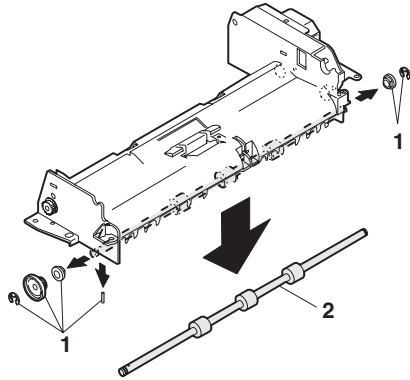
#### G. Paper entry sensor

- 1) Loosen the screw.
- 2) Open the paper exit PG.
- 3) Remove the paper entry sensor.
- 4) Remove the harness.



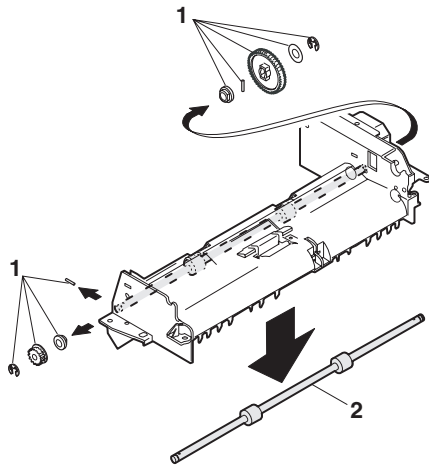
## H. PS roller

- 1) Remove the parts.
- 2) Remove the PS roller.



## I. Paper exit roller

- 1) Remove the parts.
- 2) Remove the paper exit roller.



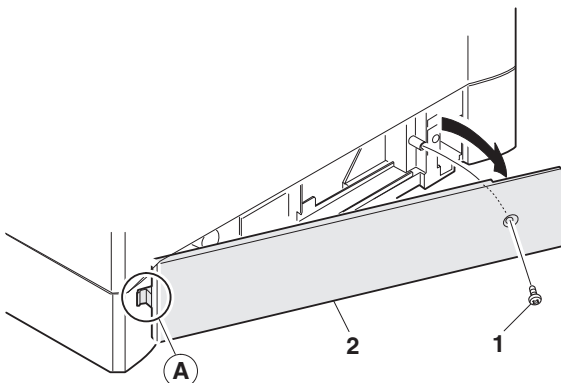
## [4] AR-DE9

### 1. Disassembly and assembly

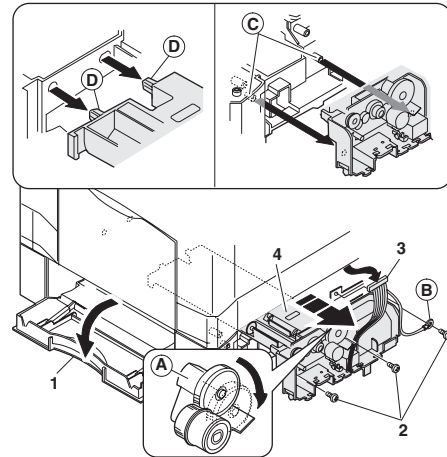
| No. | Part name Ref.        |
|-----|-----------------------|
| A   | Paper sensor          |
| B   | Cassette detection SW |
| C   | Paper feed solenoid   |
| D   | Transport roller      |
| E   | Paper feed clutch     |
| F   | 2nd paper feed roller |

#### Paper feed unit removal

- 1) Remove the screw.
  - 2) Remove the rear cover.
- When installing, engage the pawl and install the unit.



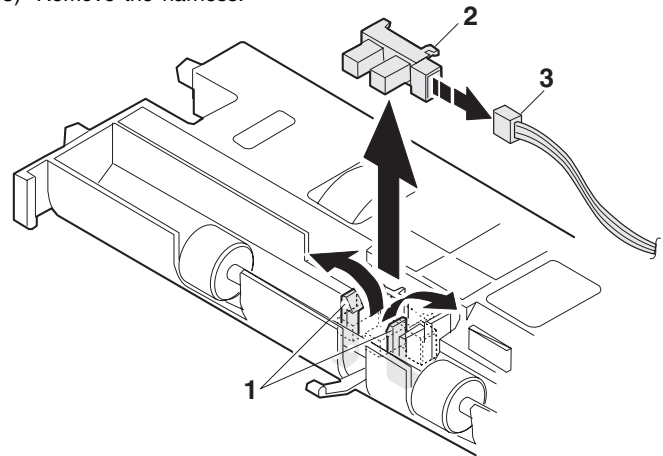
- 1) Open the right cabinet.
- 2) Remove three screws.
- 3) Remove one connector.
- 4) While tilting down the 2nd connection arm A, pull and remove the paper feed unit toward you.



- \* When installing, securely insert two bosses C on the machine side and two bosses D on the paper feed unit side. Be sure to fix the earth B.
- \* Insert the 2nd page feed.

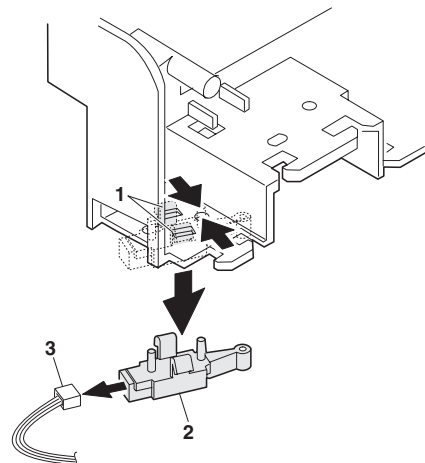
## A. Paper sensor

- 1) Remove the pawl.
- 2) Remove the paper sensor.
- 3) Remove the harness.



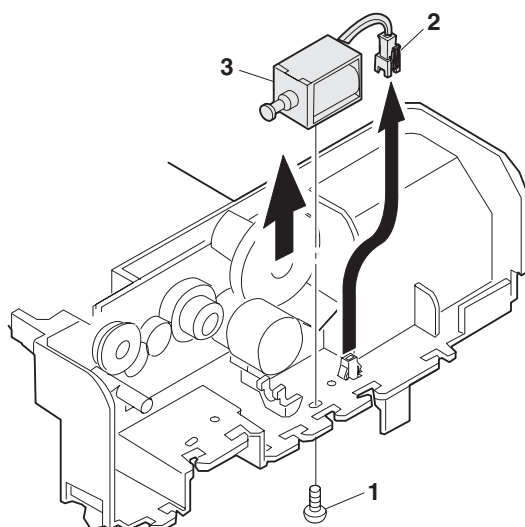
## B. Cassette detection SW

- 1) Remove the pawl.
- 2) Remove the cassette detection SW.
- 3) Remove the harness.



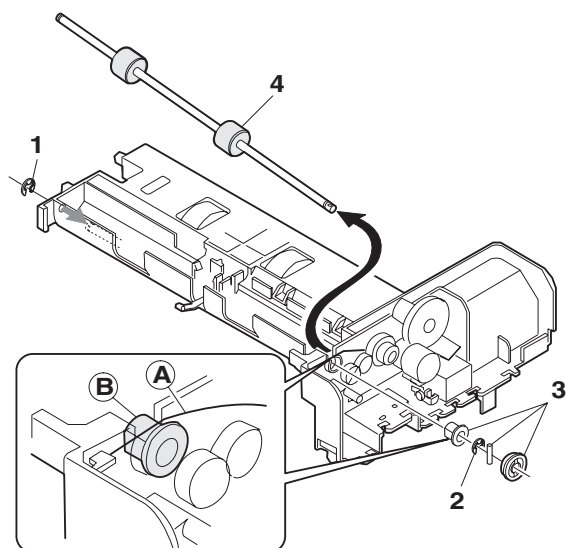
### C. Paper feed solenoid

- 1) Remove the screw.
- 2) Remove the connector.
- 3) Remove the paper feed solenoid.



### D. Transport roller

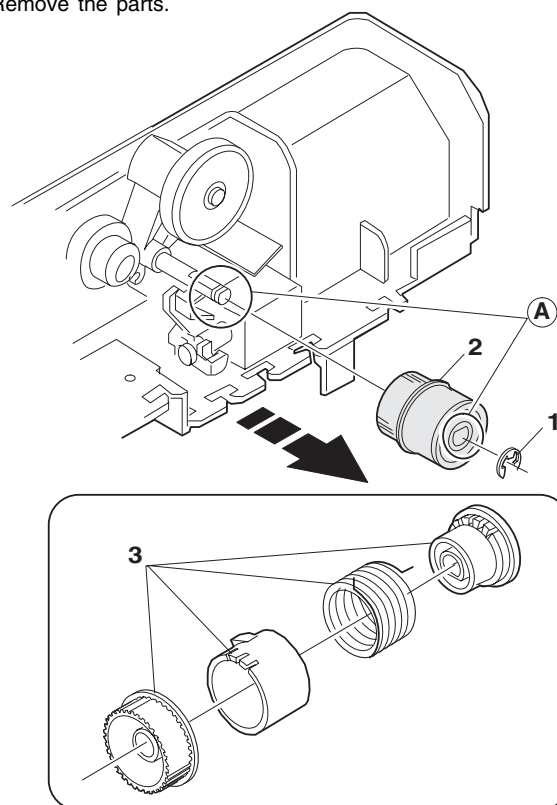
- 1) Remove two E-rings.
- 2) Remove the transport roller.



\* Install so that the earth spring A is brought into contact over bearing B.

### E. Paper feed clutch

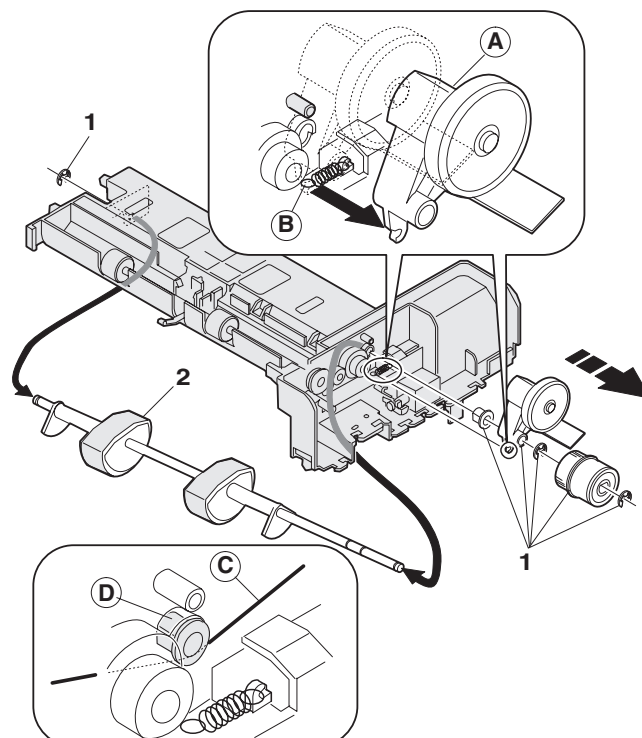
- 1) Remove the E-ring.
- 2) Remove the paper feed clutch.
- 3) Remove the parts.



\* When installing, fit the cut surface A.

### F. 2nd paper feed roller

- 1) Remove the E-ring and the parts.
- 2) Remove the 2nd paper feed roller.

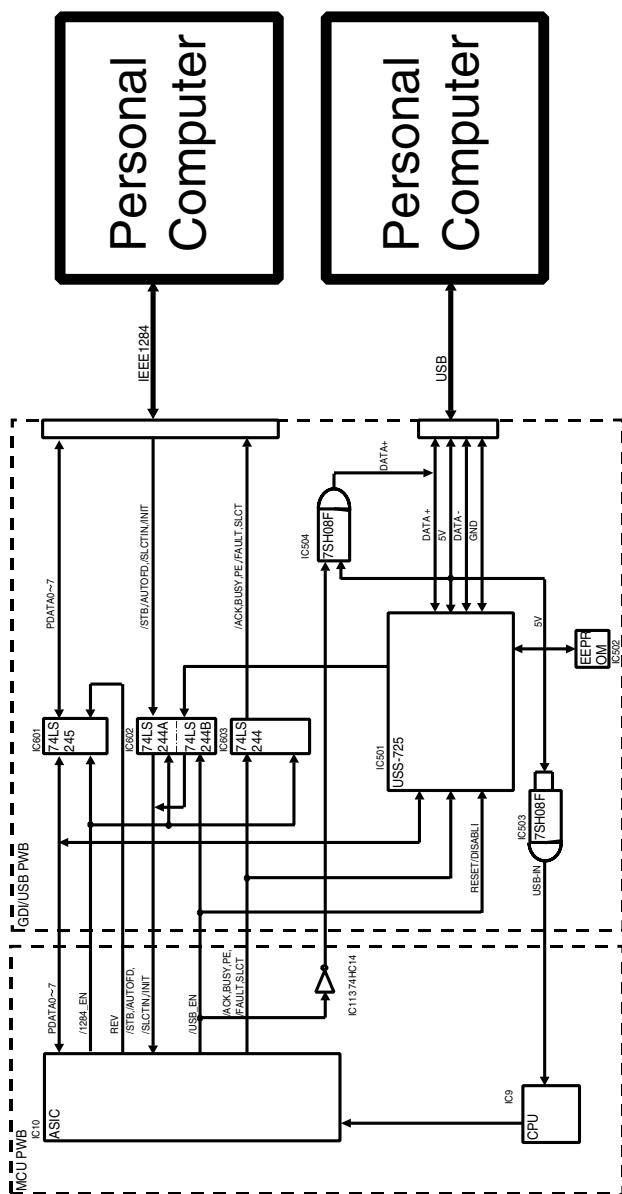


\* When installing, hang the 2nd connection arm on the 2nd connection arm SP B. Be sure to install so that the earth spring C is in contact under the bearing D.

## [5] AR-PG1

### 1. Electrical section

#### A. GDI/USB PWB



The GDI/USB PWB has two circuits; one for transmitting and receiving IEEE1284 signals and the other for transmitting and receiving USB signals and converting USB signals into IEEE1284 signals.

IC601, 602 and 603 are connected between IEEE1284 and ASIC to convert signals.

IC501 transmits and receives USB signals and converts USB signals into IEEE1284 signals.

IC502 stores various setup data necessary for USB operation of IC501.

IC503 informs the CPU of connection of USB. It is connected with PC via a USB cable. When 5V is inputted from PC to the IC's input pin, the output pin (signal name: USB-IN) is driven to HIGH to inform the CPU of connection of USB.

IC504 detects connection with PC via a USB cable, supplies power to the USB port signal line (signal name: DATA+) to enable USB communication.

When USB is connected, the CPU enables USB and disables IEEE1284.

(When USB is enabled, IE1284 is disabled.)

## 2. Interface

### A. PARALLEL INTERFACE

This printer uses a bi-directional parallel interface. Use the supplied interface cable.

#### Connector

36-pin DDK 57LE-40360-730B (D29) female connector or equivalent connector

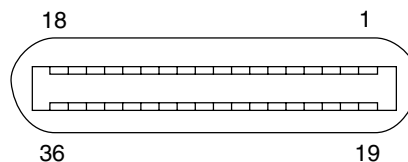
#### Cable

Shielded type bi-directional parallel interface

For best results,, use a printer interface cable which is IEEE1284 compliant.

#### Pin configuration

The pin numbers and signal names are listed in the following table.



| Pin No. | Signal name    | Pin No. | Signal name      |
|---------|----------------|---------|------------------|
| 1       | STB            | 19      | GND (STB RET)    |
| 2       | DATA1          | 20      | GND (DATA1 RET)  |
| 3       | DATA2          | 21      | GND (DATA2 RET)  |
| 4       | DATA3          | 22      | GND (DATA3 RET)  |
| 5       | DATA4          | 23      | GND (DATA4 RET)  |
| 6       | DATA5          | 24      | GND (DATA5 RET)  |
| 7       | DATA6          | 25      | GND (DATA6 RET)  |
| 8       | DATA7          | 26      | GND (DATA7 RET)  |
| 9       | DATA8          | 27      | GND (DATA8 RET)  |
| 10      | ACKNLG         | 28      | GND (ACKNLG RET) |
| 11      | BUSY           | 29      | GND (BUSY RET)   |
| 12      | PE (Paper End) | 30      | GND (PE RET)     |
| 13      | SLTC           | 31      | INPRM            |
| 14      | AUTO LF        | 32      | FAULT            |
| 15      | (NC)           | 33      | (NC)             |
| 16      | GND (0 V)      | 34      | (NC)             |
| 17      | FG             | 35      | +5 V             |
| 18      | +5 V           | 36      | SLTC IN          |

## B. USB INTERFACE

### Connector

4-pin DDK DUSB-BRA42-T11

Type-B connector

### Cable

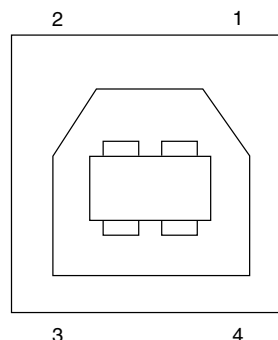
Shielded twisted pair cable

(2 m (6 feet) Max.: high-speed transmission equivalent)

### Pin configuration

The pin numbers and signal names are listed in the following table.

| Pin No. | Signal name |
|---------|-------------|
| 1       | +5V         |
| 2       | – DATA      |
| 3       | +DATA       |
| 4       | GND         |



## 3. Print Area

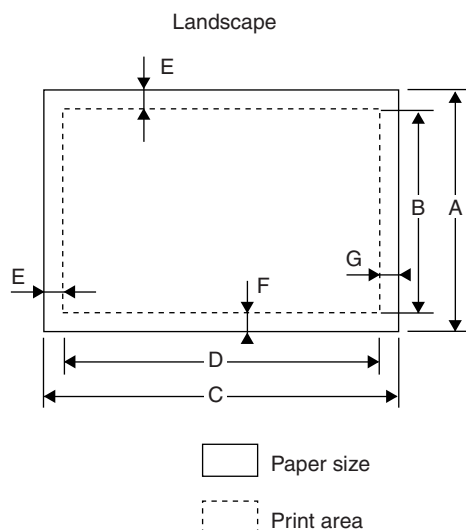
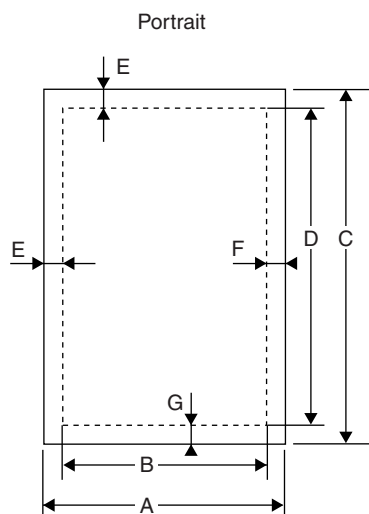
The print area of this printer is shown below.

### A. 600 dpi

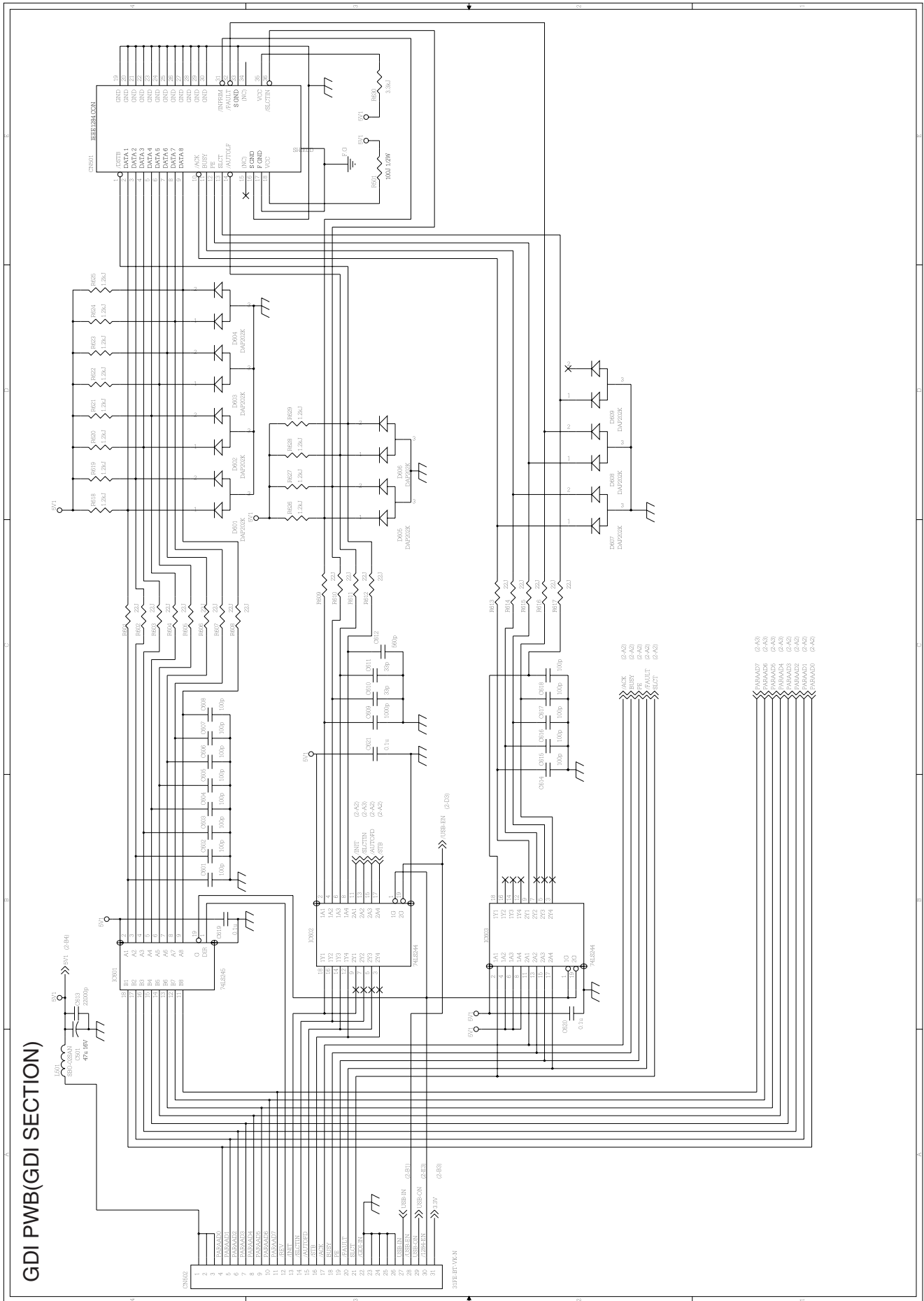
| Paper size | Dots |      |      |      |     |     |     |
|------------|------|------|------|------|-----|-----|-----|
|            | A    | B    | C    | D    | E   | F   | G   |
| Letter     | 5100 | 4900 | 6600 | 6400 | 100 | 100 | 100 |
| Legal      | 5100 | 4900 | 8400 | 8200 | 100 | 100 | 100 |
| Invoice    | 3300 | 3100 | 5100 | 4900 | 100 | 100 | 100 |
| A4         | 4960 | 4760 | 7014 | 6814 | 100 | 100 | 100 |
| A5         | 3508 | 3308 | 4960 | 4760 | 100 | 100 | 100 |
| B5         | 4298 | 4098 | 6070 | 5870 | 100 | 100 | 100 |
| Folio      | 5100 | 4900 | 7800 | 7600 | 100 | 100 | 100 |
| Foolscap   | 5100 | 4900 | 7440 | 7240 | 100 | 100 | 100 |

### B. 300 dpi

| Paper size | Dots |      |      |      |    |    |    |
|------------|------|------|------|------|----|----|----|
|            | A    | B    | C    | D    | E  | F  | G  |
| Letter     | 2550 | 2450 | 3300 | 3200 | 50 | 50 | 50 |
| Legal      | 2550 | 2450 | 4200 | 4100 | 50 | 50 | 50 |
| Invoice    | 1650 | 1550 | 2550 | 2450 | 50 | 50 | 50 |
| A4         | 2480 | 2380 | 3507 | 3407 | 50 | 50 | 50 |
| A5         | 1754 | 1654 | 2480 | 2380 | 50 | 50 | 50 |
| B5         | 2149 | 2049 | 3035 | 2935 | 50 | 50 | 50 |
| Folio      | 2550 | 2450 | 3900 | 3800 | 50 | 50 | 50 |
| Foolscap   | 2550 | 2450 | 3720 | 3620 | 50 | 50 | 50 |



## 4. Circuit diagram





**SHARP****PARTS GUIDE**

CODE:00ZAR150PT/P1

**AR-SP3  
AR-FX3  
AR-DE9  
MODEL AR-PG1****CONTENTS**

- |                                    |                                           |
|------------------------------------|-------------------------------------------|
| 1 AR-SP3-1(Exterors)               | 9 AR-SP3(Packing material & Accessories)  |
| 2 AR-SP3-2(Pick up unit)           | 10 AR-FX3(Packing material & Accessories) |
| 3 AR-SP3-3(Transport unit)         | 11 AR-DE9(Packing material & Accessories) |
| 4 AR-FX3-1(Base tray unit)         | 12 AR-PG1(Packing material & Accessories) |
| 5 AR-FX3-2(Fax panel pick up unit) | 13 AR-FX3(Fax panel PWB)                  |
| 6 AR-FX3-3(Fax transport unit)     | 14 AR-FX3(Fax PWB)                        |
| 7 AR-DE9(2nd frame unit)           | 15 AR-PG1(GDI/USB PWB)                    |
| 8 AR-DE9(2nd paper feeding unit)   | ■ Index                                   |

**SHARP CORPORATION**

This document has been published to be used for after sales service only.  
The contents are subject to change without notice.

## DEFINITION

The definition of each Rank is as follows and also noted in the list

A : Parts necessary to be stocked as High usage parts.

B : Parts necessary to be stocked as Standard usage parts.

C : Low usage parts.

D : Parts necessary for refurbish.

E : Unit parts recommended to be stocked for efficient after sales service.

Please note that the lead time for the said parts may be longer than normal parts.

S : Consumable parts.

Please note that the following parts used in Copier under the same description are classified into A or B Rank depending upon the place used.

Example: Gear made of Metal, Sprocket, Bearing, Belt made of Rubber, Spring clutch mechanism.

A Rank : The parts which may be with the revolution or loading.

B Rank : Parts similar to A Rank parts, but are not included in Rank A.

Because parts marked with "⚠" is indispensable for the machine safety maintenance and operation, it must be replaced with the parts specific to the product specification.

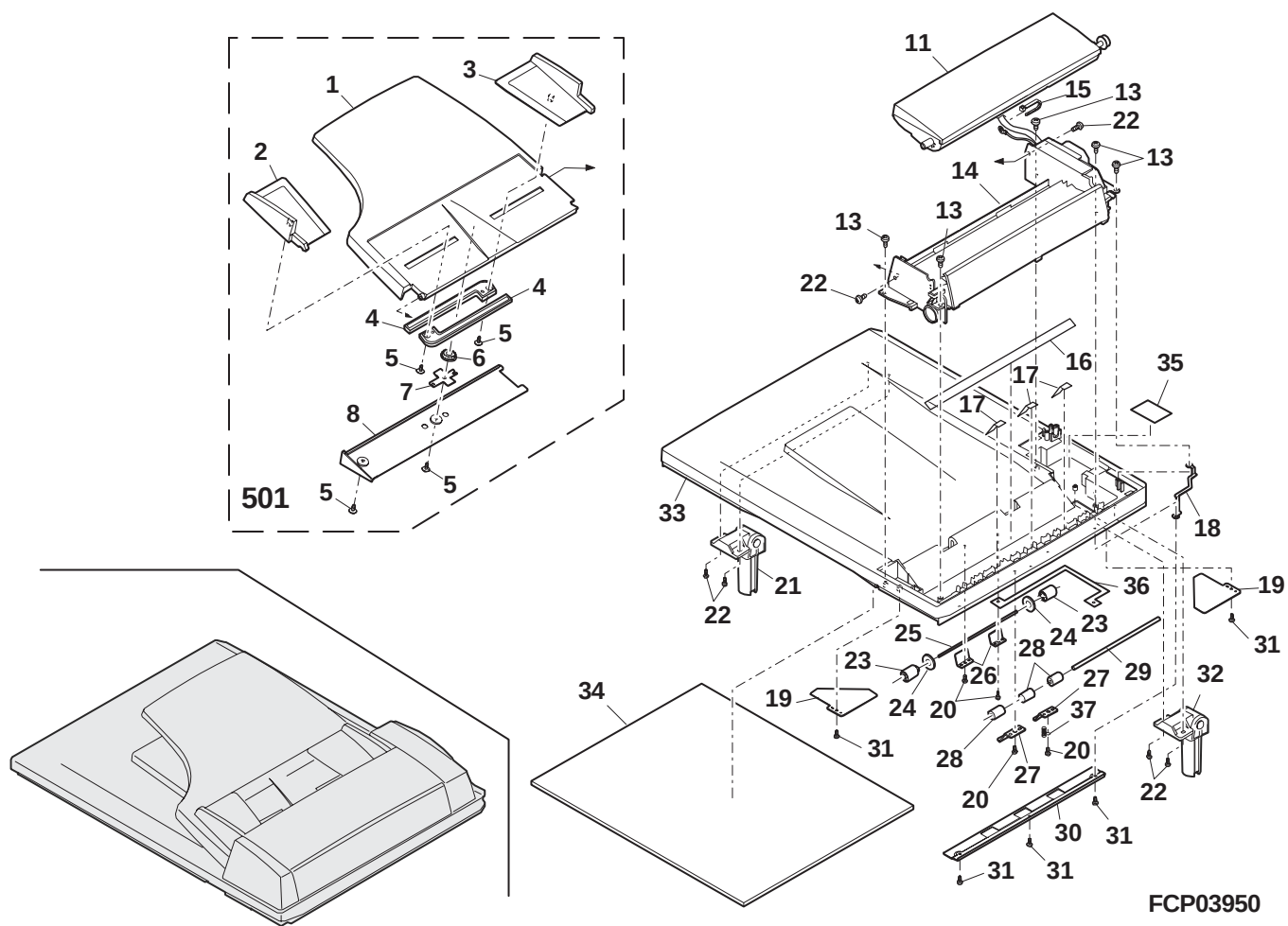
- Other than this Parts Guide, please refer to documents Service Manual (including Circuit Diagram) of this model.
- Please use the 13 digit code described in the right hand corner of front cover of the document, when you place an order.
- For U.S. only-Use order codes provided in advertising literature.

Do not order from parts department.

1 AR-SP3-1(Exterors)

[illegible]

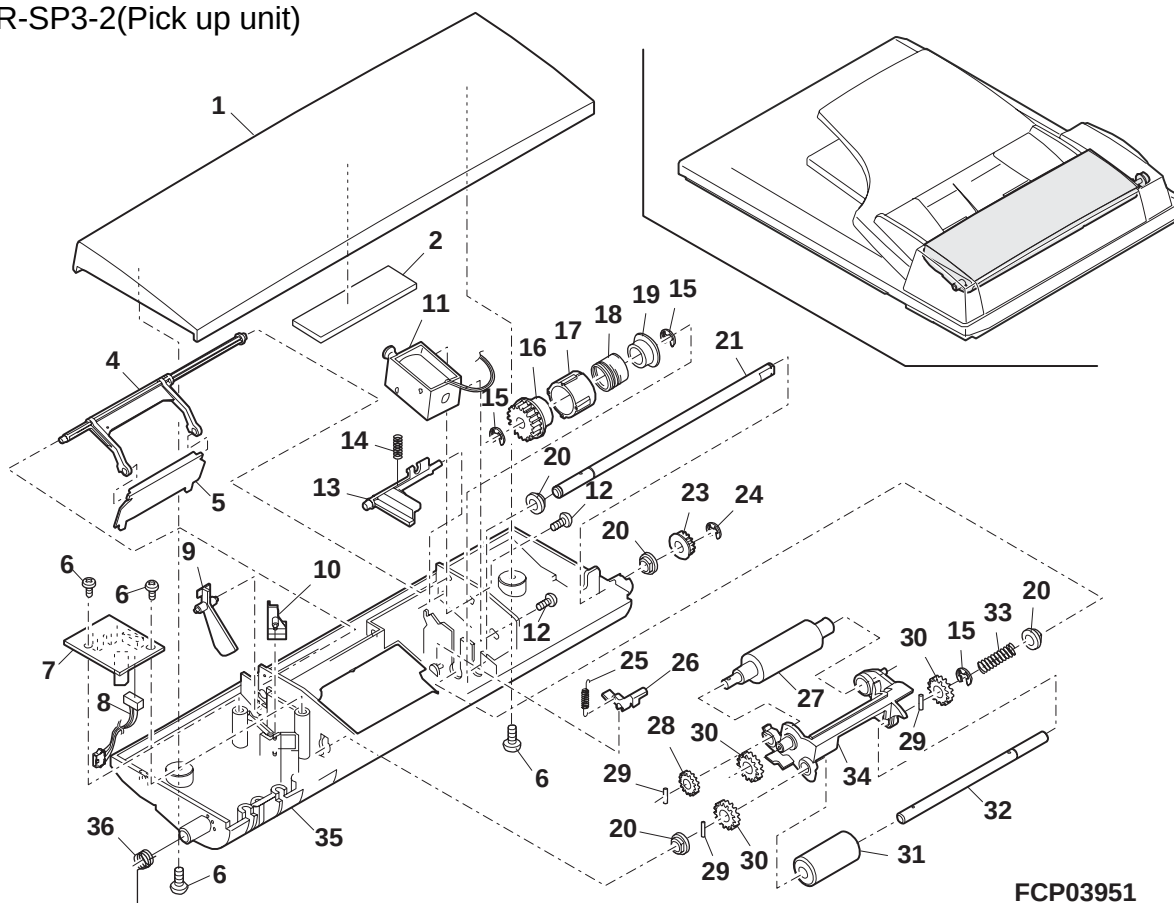
# 1 AR-SP3-1(Exterors)



## 2 AR-SP3-2(Pick up unit)

| NO.    | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION                    |
|--------|---------------|------------|----------|-----------|--------------------------------|
| 1      | GCAB-0008QSZZ | AM         |          | D         | Open and shut exterior         |
| 2      | PSPO-0002QSZZ | AC         |          | C         | Stopper sponge                 |
| 4      | MARMP0003QSZ1 | AD         |          | C         | Stopper arm                    |
| 5      | LSTPP0001QSZZ | AD         |          | C         | Paper stopper                  |
| 6      | XEBSD30P08000 | AA         |          | C         | Screw (3×8)                    |
| 7      | CPWBF0009QS51 | AG         |          | E         | SPF sensor PWB                 |
| 8      | DHAI-0055QSZZ | AK         |          | C         | Sensor harness                 |
| 9      | MLEVP0009QSZZ | AD         |          | C         | Set detect lever ACT           |
| 10     | MLEVP0010QSZZ | AE         |          | C         | Open and shut detect lever ACT |
| 11     | RPLU-0004QSZ1 | AQ         |          | B         | PU solenoid                    |
| 12     | XBPSD30P06KS0 | AA         |          | C         | Screw (3×6KS)                  |
| 13     | MARMP0002QSZZ | AD         |          | C         | Solenoid arm                   |
| 14     | MSPRT0067QSZ1 | AB         |          | C         | Solenoid arm spring            |
| 15     | XRESP40-06000 | AA         |          | C         | E type ring                    |
| 16     | NGERH0073QSZZ | AE         |          | C         | Clutch gear (20T)              |
| 17     | PPiPP0008QSZZ | AD         |          | C         | SPF clutch sleeve              |
| 18     | MSPRC1316FCZ1 | AE         |          | C         | MF clutch spring B             |
| 19     | LBOSZ1508FCZZ | AG         |          | C         | Cam boss A2                    |
| 20     | LBSHZ0303FCZZ | AC         |          | C         | M bushing C                    |
| 21     | NSFTZ0012QSZZ | AG         |          | C         | Clutch shaft                   |
| 23     | NPLYZ0010QSZZ | AE         |          | C         | 20MXL pulley                   |
| 24     | XRESP30-06000 | AA         |          | C         | E type ring                    |
| 25     | MSPRT0066QSZ1 | AC         |          | C         | Clutch pawl spring             |
| 26     | PTME-0019QSZZ | AD         |          | B         | Clutch pawl                    |
| 27     | NROLP0024QSZZ | AL         |          | C         | Pick up roller                 |
| 28     | NGERH0990FCZZ | AB         |          | C         | Gear (16T)                     |
| 29     | XPSSP20-07000 | AA         |          | C         | Spring pin (φ2-7)              |
| 30     | NGERH0992FCZZ | AB         |          | C         | Gear (20T)                     |
| 31     | NROLR0922FCZZ | AR         |          | C         | Manual feeding roller          |
| 32     | NSFTZ0011QSZZ | AG         |          | C         | PF shaft                       |
| 33     | MSPRC0115QSZZ | AB         |          | C         | Paper feeding spring           |
| 34     | MARMP0004QSZZ | AF         |          | C         | Pick up arm                    |
| 35     | LFRM-0011QSZ1 | AL         | N        | C         | Paper feeding frame            |
| 36     | MSPRD0114QSZ1 | AD         |          | C         | PF frame spring                |
| (Unit) |               |            |          |           |                                |
| 901    | CFRM-0011QS51 | BE         |          | E         | SPF pick up unit               |
|        |               |            |          |           |                                |
|        |               |            |          |           |                                |
|        |               |            |          |           |                                |

## 2 AR-SP3-2(Pick up unit)

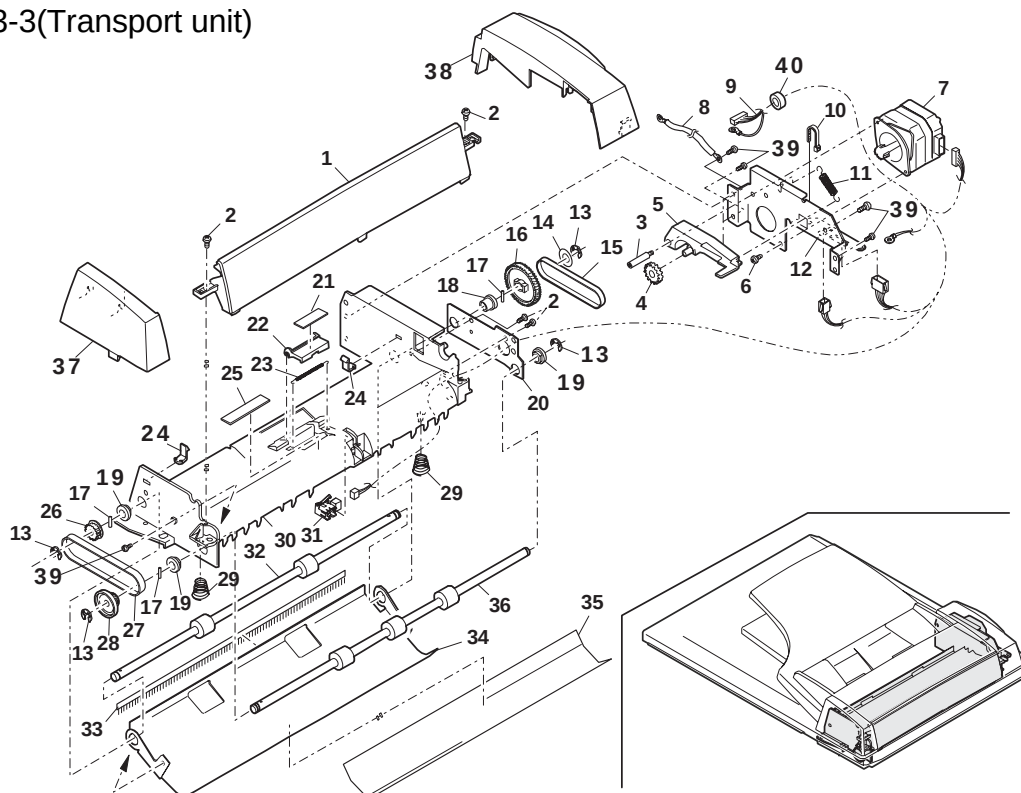


FCP03951

### 3 AR-SP3-3(Transport unit)

| NO.    | PARTS CODE       | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION                 |
|--------|------------------|------------|----------|-----------|-----------------------------|
| 1      | PG i DM0042QSZZ  | AL         |          | C         | U-turn paper guide          |
| 2      | XEBSD30P12000    | AA         |          | C         | Screw (3×12)                |
| 3      | LX-BZ0012QSZZ    | AC         |          | C         | Screw                       |
| 4      | NGERH0972FCZZ    | AB         |          | C         | Gear (27T)                  |
| 5      | MARMP0001QSZZ    | AF         |          | C         | Drive arm                   |
| 6      | XBPSD30P05K00    | AA         |          | C         | Screw (3×5K)                |
| 7      | RMÖTP0013QSZZ    | BB         |          | B         | SPF motor                   |
| 8      | DH A i -0084QSZ1 | AT         |          | C         | Grand wire                  |
| 9      | DH A i -0054QSZZ | AR         |          | C         | SPF interface harness       |
| 10     | LBNDJ0013FCZ1    | AA         |          | C         | Wire band                   |
| 11     | MSPRT0064QSZ1    | AC         |          | C         | Drive arm spring            |
| 12     | LFRM-0013QSZZ    | AG         |          | C         | Drive frame                 |
| 13     | XRESP50-06000    | AA         |          | C         | E type ring                 |
| 14     | PSHEP3029FCZZ    | AA         |          | C         | Flange sheet DUP2           |
| 15     | NBLTT0006QSZZ    | AG         |          | B         | Belt (83MXL4.8)             |
| 16     | NGERH0047QSZZ    | AF         |          | C         | Gear (48T/15T)              |
| 17     | XPSSP20-09000    | AA         |          | C         | Spring pin (φ2-9)           |
| 18     | NBRGC0098FCZZ    | AC         |          | C         | Bearing                     |
| 19     | NBRGM5006BCZZ    | AB         |          | C         | Bearing                     |
| 20     | LFRM-0012QSZZ    | AD         |          | C         | Frame R                     |
| 21     | PSHEZ0039QSZZ    | AG         |          | C         | Sheet                       |
| 22     | LPLTP0013QSZZ    | AD         |          | C         | Plate                       |
| 23     | MSPRC0062QSZZ    | AC         |          | C         | Pressure spring             |
| 24     | MSPRP0065QSZZ    | AD         |          | C         | Open and shut lock spring   |
| 25     | PSHEZ2174FCZZ    | AB         |          | C         | Paper feeding sheet         |
| 26     | NPLYZ0146FCZZ    | AB         |          | C         | 22MXL pulley                |
| 27     | NBLTT0003QSZZ    | AG         |          | B         | Belt (91MXL4.8)             |
| 28     | JKNBZ0004QSZZ    | AD         |          | C         | JAM release knob            |
| 29     | MSPRC0063QSZZ    | AB         |          | C         | Delivery paper guide spring |
| 30     | PG i DM0024QSZZ  | AQ         |          | C         | Transport paper guide       |
| 31     | RDTC0004QSZZ     | AL         |          | B         | Inlet detect sensor         |
| 32     | NRÖLM0023QSZZ    | AP         |          | C         | Delivery roller             |
| 33     | PBRSR0003QSZZ    | AL         |          | B         | Discharge brush             |
| 34     | PG i DH0029QSZZ  | AL         |          | C         | Delivery paper guide        |
| 35     | PSHEP0044QSZZ    | AF         |          | C         | White sheet                 |
| 36     | NRÖLM0022QSZZ    | AP         |          | C         | PS roller                   |
| 37     | PCÖVP0037QSZZ    | AH         |          | D         | Front cover                 |
| 38     | PCÖVP0038QSZZ    | AL         |          | D         | Rear cover                  |
| 39     | XEBSD30P08000    | AA         |          | C         | Screw (3×8)                 |
| 40     | RCÖRF1023LCZZ    | AL         |          | C         | Core                        |
| (Unit) |                  |            |          |           |                             |
| 901    | CFRM-0013QS51    | BS         |          | E         | SPF transport unit          |

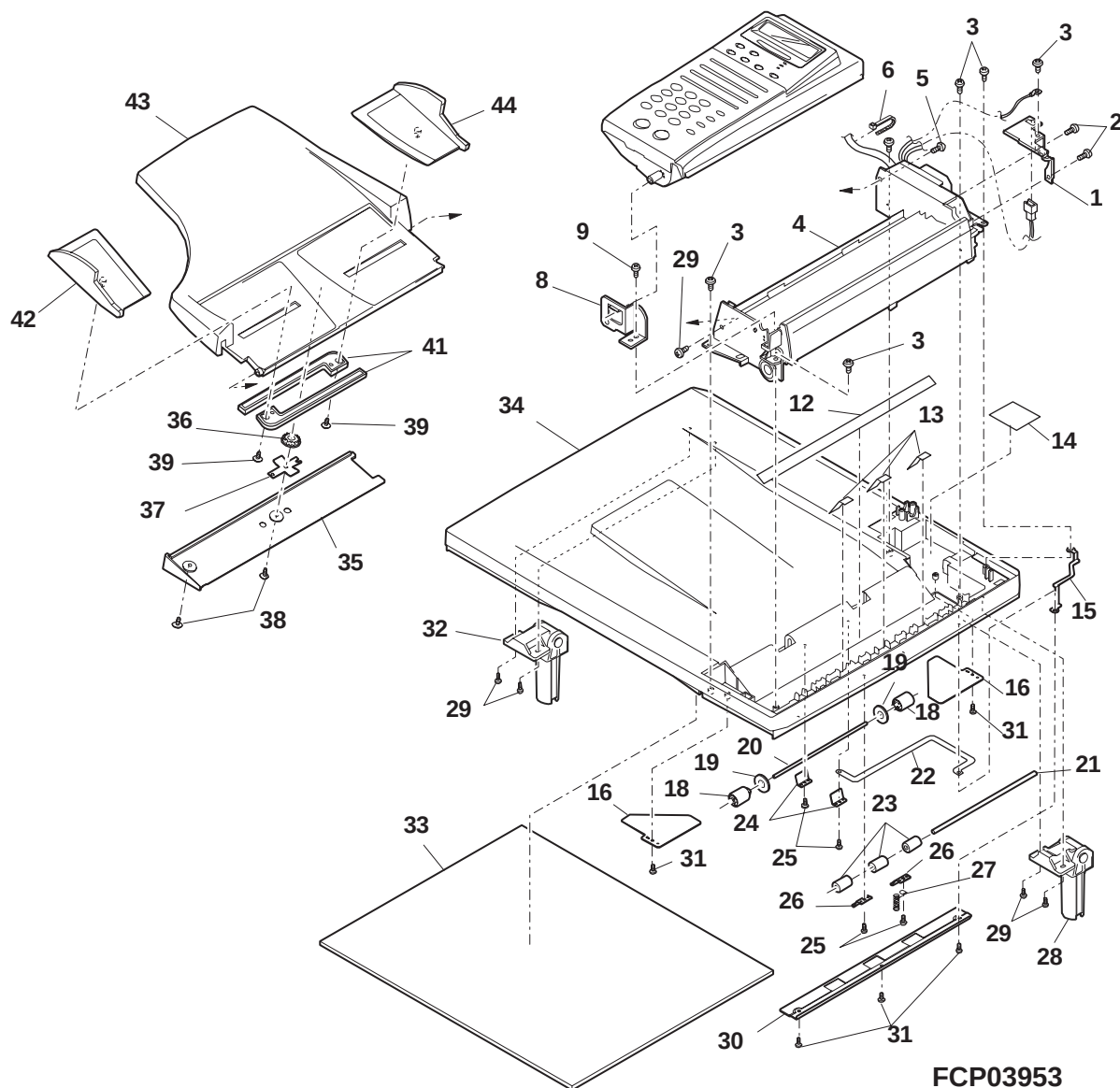
### 3 AR-SP3-3(Transport unit)



4 AR-FX3-1(Base tray unit)

[illegible]

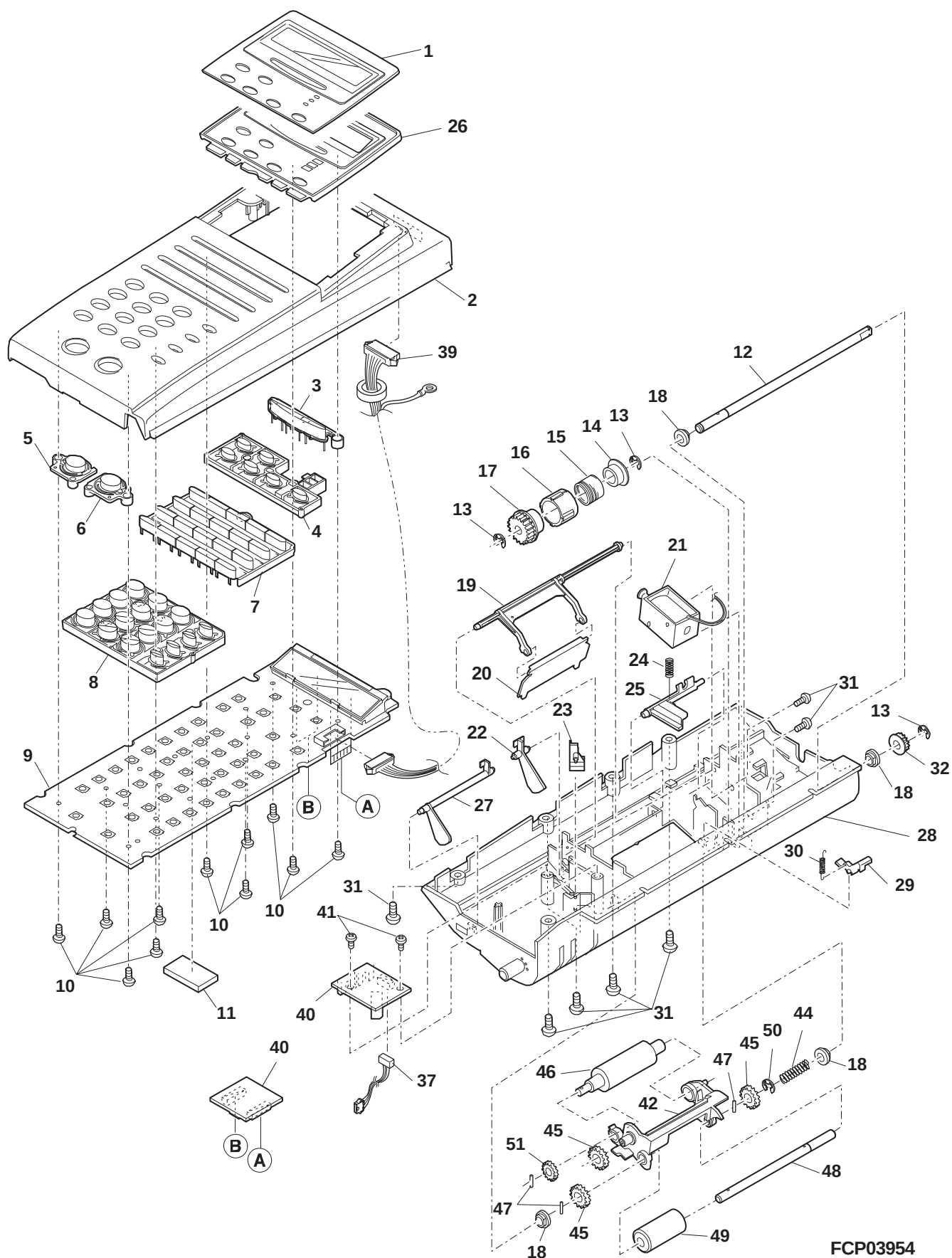
# 4 AR-FX3-1(Base tray unit)



5 AR-FX3-2(Fax panel pick up unit)

[illegible]

5 AR-FX3-2(Fax panel pick up unit)

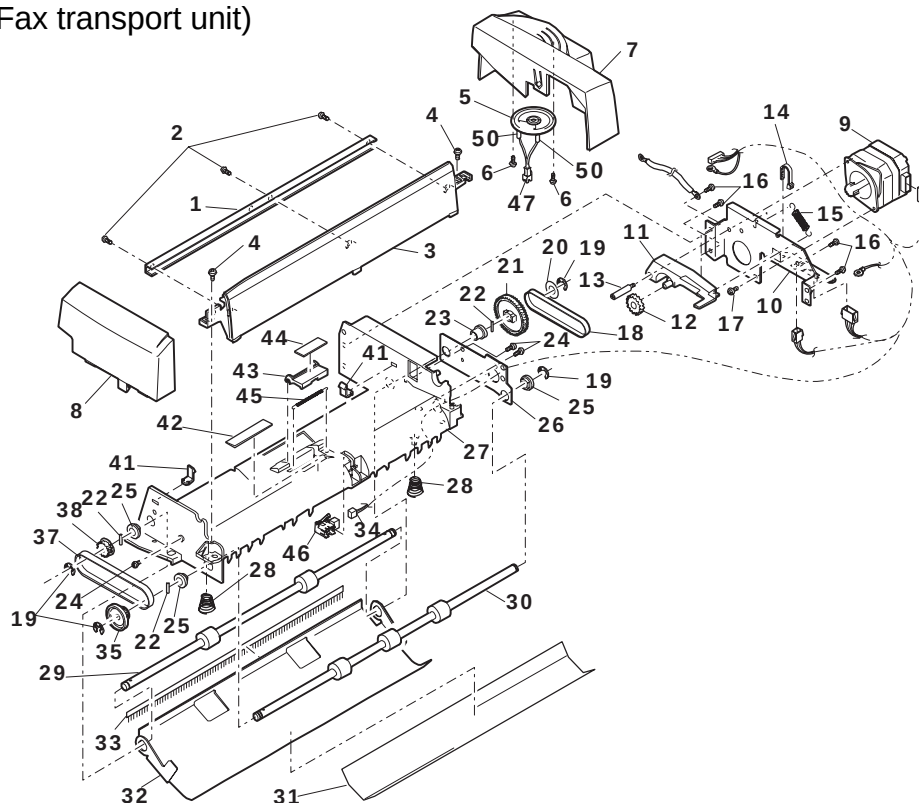


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## 6 AR-FX3-3(Fax transport unit)

| NO. | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION               |
|-----|---------------|------------|----------|-----------|---------------------------|
| 1   | LPLTM0146QSZZ | AD         |          | C         | PG reinforce plate        |
| 2   | XEBSD30P08000 | AA         |          | C         | Screw (3×8)               |
| 3   | PGIDM0058QSZZ | AK         |          | C         | U turn P/G XC             |
| 4   | XEBSD30P12000 | AA         |          | C         | Screw (3×12)              |
| 5   | VSP50PB518P// | AL         |          | B         | Speaker                   |
| 6   | XEPSD30P08X00 | AA         |          | C         | Screw (3×8X)              |
| 7   | PCÖVP0043QSZZ | AL         |          | C         | Rear cover XC             |
| 8   | PCÖVP0042QSZZ | AH         |          | C         | Front cover XC            |
| 9   | RMÖTP0013QSZZ | BB         |          | B         | SPF motor                 |
| 10  | LFRM-0013QSZZ | AG         |          | C         | Drive frame               |
| 11  | MARMP0001QSZZ | AF         |          | C         | Drive arm                 |
| 12  | NGERH0972FCZZ | AB         |          | C         | Gear (27T)                |
| 13  | LX-BZ0012QSZZ | AC         |          | C         | Screw                     |
| 14  | LBNDJ0013FCZ1 | AA         |          | C         | Wire band                 |
| 15  | MSPRT0064QSZ1 | AC         |          | C         | Drive arm spring          |
| 16  | XEBSD30P08000 | AA         |          | C         | Screw (3×8)               |
| 17  | XBPSD30P05K00 | AA         |          | C         | Screw (3×5K)              |
| 18  | NBLTT0006QSZZ | AG         |          | B         | Belt (83MXL4.8)           |
| 19  | XRESP50-06000 | AA         |          | C         | E type ring               |
| 20  | PSHEP3029FCZZ | AA         |          | C         | Flange sheet DUP2         |
| 21  | NGERH0047QSZZ | AF         |          | C         | Gear (48T/15T)            |
| 22  | XPSSP20-09000 | AA         |          | C         | Spring pin (φ2-9)         |
| 23  | NBRGC0098FCZZ | AC         |          | C         | Bearing R                 |
| 24  | XEBSD30P08000 | AA         |          | C         | Screw (3×8)               |
| 25  | NBRGM5006BCZZ | AB         |          | C         | Metal D (B-F6-7)          |
| 26  | LFRM-0012QSZZ | AD         |          | C         | Frame R                   |
| 27  | PGIDM0024QSZZ | AQ         |          | C         | Transport PG              |
| 28  | MSPRC0063QSZZ | AB         |          | C         | Delivery PG spring        |
| 29  | NRÖLM0023QSZZ | AP         |          | C         | Delivery roller           |
| 30  | NRÖLM0022QSZZ | AP         |          | C         | PS roller                 |
| 31  | PSHEZ0164QSZZ | AF         |          | C         | White sheet R             |
| 32  | PGIDH0029QSZZ | AL         |          | C         | Delivery paper guide      |
| 33  | PBRSR0003QSZZ | AL         |          | B         | Discharge brush           |
| 34  | DHAi-0161QSZZ | BA         |          | C         | SPF interface harness FAX |
| 35  | JKNBZ0004QSZZ | AD         |          | C         | JAM release knob          |
| 37  | NBLTT0003QSZZ | AG         |          | B         | Belt (91MXL4.8)           |
| 38  | NPLYZ0146FCZZ | AB         |          | C         | Pulley (22MXL)            |
| 41  | MSPRP0065QSZZ | AD         |          | C         | Open and shut lock spring |
| 42  | PSHEZ2174FCZZ | AB         |          | C         | Paper feeding sheet       |
| 43  | LPLTP0013QSZZ | AD         |          | C         | Plate                     |
| 44  | PSHEZ0039QSZZ | AG         |          | C         | Plape                     |
| 45  | MSPRC0062QSZZ | AC         |          | C         | Pressure spring           |
| 46  | RDTCT0004QSZZ | AL         |          | B         | Inlet detect sensor       |
| 47  | DHAi-0162QSZZ | AE         |          | C         | Speaker harness           |
| 50  | PTUBP0119FCZZ | AB         |          | C         | MC protect tube           |

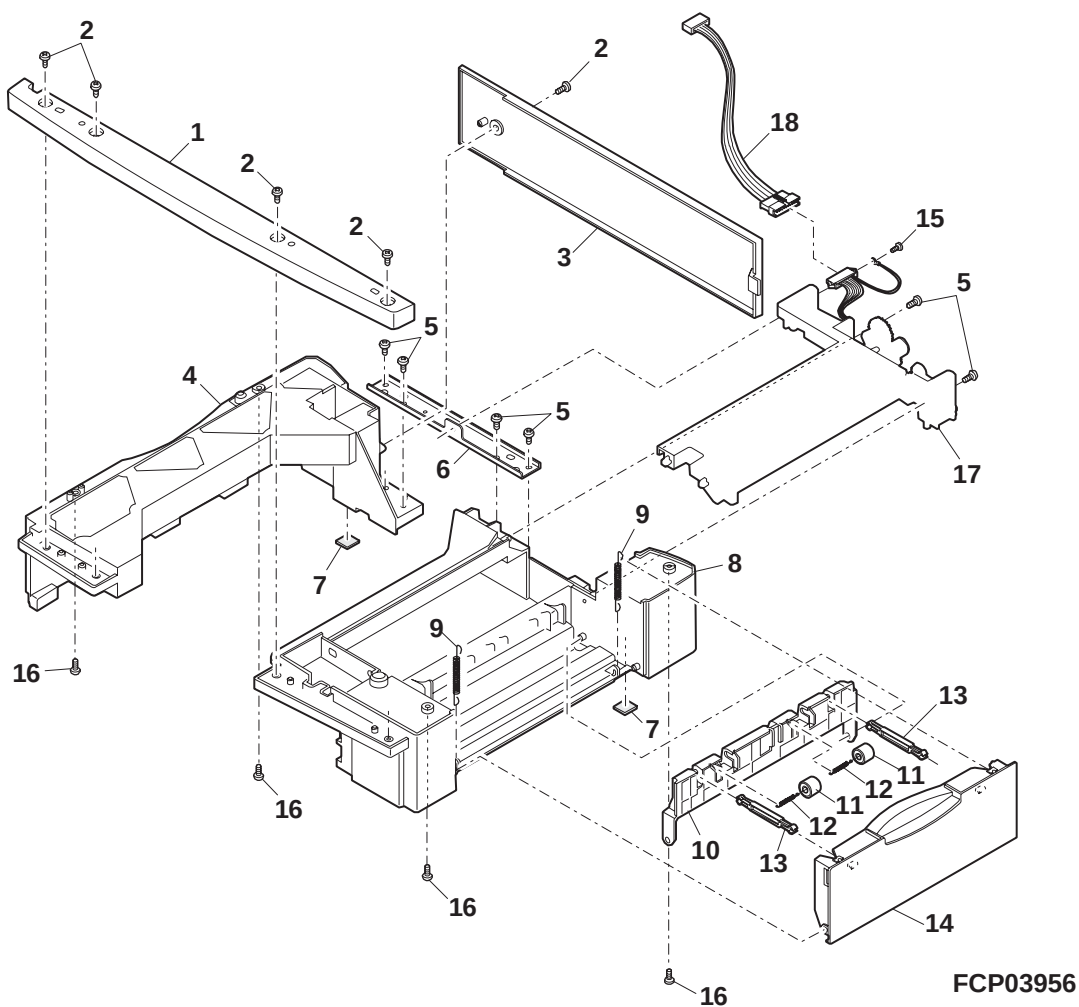
## 6 AR-FX3-3(Fax transport unit)



FCP03955

**7 AR-DE9(2nd frame unit)**

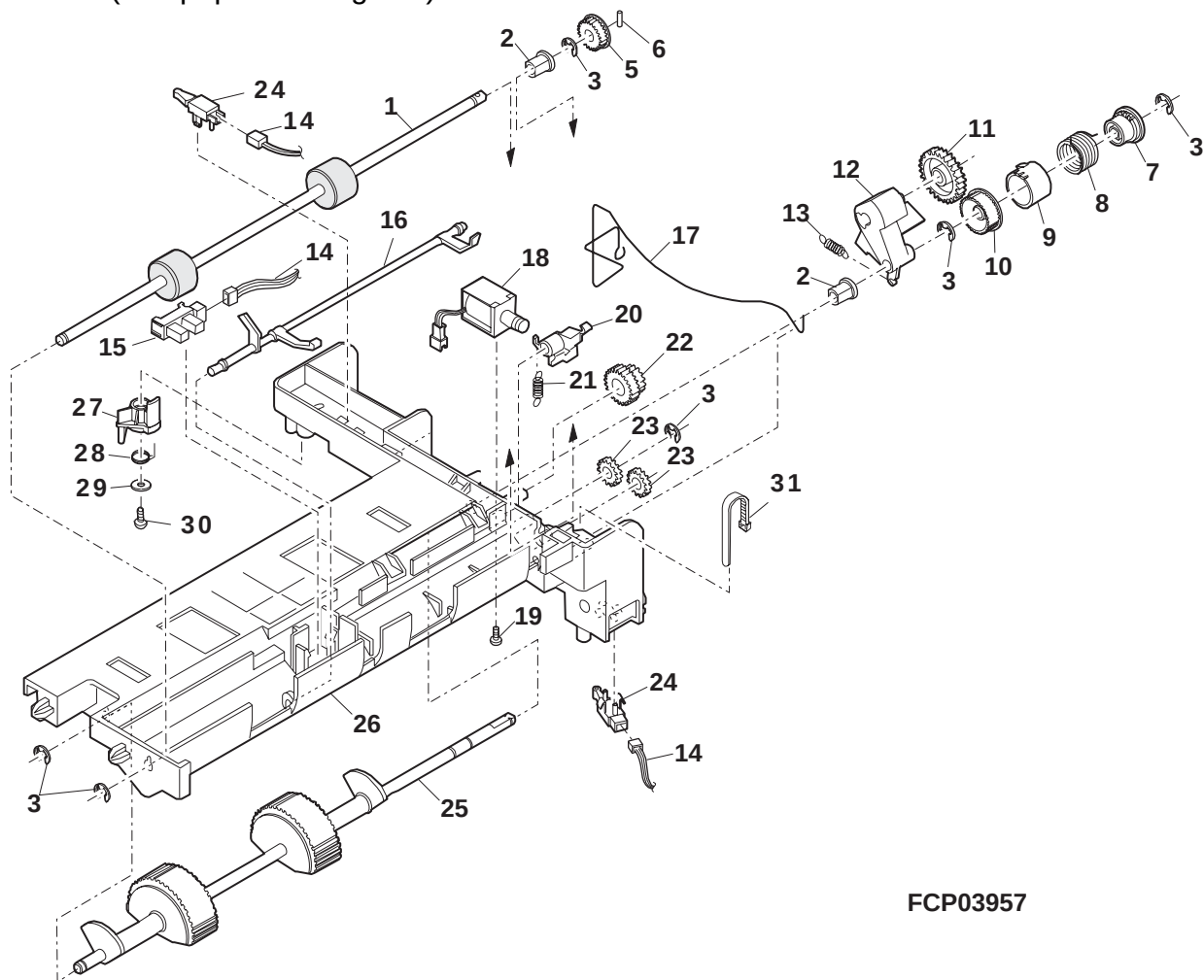
| NO. | PARTS CODE     | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION                |
|-----|----------------|------------|----------|-----------|----------------------------|
| 1   | GCÖVA00005QSZZ | AM         |          | D         | Front cover                |
| 2   | XEBSE40P12000  | AA         |          | C         | Screw (4×12)               |
| 3   | GCÖVA00006QSZZ | AN         |          | D         | Rear cover                 |
| 4   | PGiDM00016QSZZ | AY         |          | C         | Guide L                    |
| 5   | XEBSD40P12000  | AA         |          | C         | Screw (4×12)               |
| 6   | LPLTM00036QSZZ | AF         |          | C         | 2ND joint plate R          |
| 7   | GLEGG00064FCZZ | AC         |          | D         | Rubber foot                |
| 8   | PGiDM00015QSZZ | AY         |          | C         | Guide R                    |
| 9   | MSPRC2544FCZZ  | AC         |          | C         | 2ND transport cover spring |
| 10  | GCÖVA00007QSZZ | AK         |          | D         | Transport cover            |
| 11  | NRÖLP1060FCZZ  | AF         |          | C         | U-turn roller              |
| 12  | MSPRT0112QSZ1  | AC         |          | C         | Transport collar spring    |
| 13  | MARMP00012QSZZ | AD         |          | C         | 2ND door arm               |
| 14  | GCÖVA00008QSZZ | AK         |          | D         | Right cover                |
| 15  | XHBSD40P08000  | AA         |          | C         | Screw (4×8)                |
| 17  | CFRM-00009QSS3 | BE         |          | E         | 2nd paper feeding unit     |
| 18  | DHAI-00053QSZZ | AM         |          | C         | 2CS interface harness      |
|     |                |            |          |           |                            |
|     |                |            |          |           |                            |
|     |                |            |          |           |                            |

**7 AR-DE9(2nd frame unit)**


## 8 AR-DE9(2nd paper feeding unit)

| NO.    | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION             |
|--------|---------------|------------|----------|-----------|-------------------------|
| 1      | NRÖLP0019QSZ1 | AP         |          | C         | Transport roller        |
| 2      | NBRGZ1043HCZZ | AD         |          | C         | Bearing (B-F5-13)       |
| 3      | XRESP40-06000 | AA         |          | C         | E type ring             |
| 5      | NGERH0992FCZZ | AB         |          | C         | Gear (20T)              |
| 6      | XPSSP20-07000 | AA         |          | C         | Spring pin (φ2-7)       |
| 7      | LBOSZ1031FCZZ | AC         |          | C         | Clutch boss             |
| 8      | MSPRC0161QSZZ | AF         |          | C         | Clutch spring           |
| 9      | PPiPP0007QSZZ | AD         |          | C         | Clutch pipe             |
| 10     | NGERH1132FCZZ | AH         |          | C         | Clutch gear (29T)       |
| 11     | NGERH1207FCZZ | AF         |          | C         | Joint gear (40T)        |
| 12     | MARMP0229FCZZ | AE         |          | C         | Joint arm               |
| 13     | MSPRC2545FCZZ | AB         |          | C         | 2nd joint arm spring    |
| 14     | DHAI-0158QSZZ | AN         |          | C         | 2nd harness             |
| 15     | VHGP1A71A1-1  | AG         |          | B         | Photo sensor (GP1A71A1) |
| 16     | MLEVP0033QSZZ | AF         |          | C         | PPDI actuator           |
| 17     | MSPRD0058QSZZ | AG         |          | C         | Earth spring            |
| 18     | RPLU-0010QSZZ | AN         |          | B         | PF solenoid             |
| 19     | XHBSD30P06000 | AA         |          | C         | Screw (3×6)             |
| 20     | PTME-0008QSZZ | AD         |          | C         | PF clutch pawl          |
| 21     | MSPRC2546FCZZ | AB         |          | C         | 2nd clutch pawl spring  |
| 22     | NGERH0041QSZZ | AF         |          | C         | 2nd gear ID (18T/26T)   |
| 23     | NGERH0990FCZZ | AB         |          | C         | Gear (16T)              |
| 24     | QSW-B0003QSZZ | AF         |          | B         | Tray detect switch      |
| 25     | CROLP0015QS01 | AU         |          | C         | Paper feeding roller    |
| 26     | LFRM-0009QSZZ | AQ         |          | D         | Paper feeding frame     |
| 27     | MLEVP0050QSZZ | AD         |          | C         | Actuator lever          |
| 28     | MSPRD0159QSZZ | AC         |          | C         | 2nd actuator spring     |
| 29     | XWHSD30-08160 | AA         |          | C         | Washer                  |
| 30     | XEBSD30P08000 | AA         |          | C         | Screw (3×8)             |
| 31     | LBNDJ0013FCZ1 | AA         |          | C         | Wire band               |
| (Unit) |               |            |          |           |                         |
| 901    | CFRM-0009QS53 | BE         |          | E         | 2nd paper feeding unit  |

## 8 AR-DE9(2nd paper feeding unit)

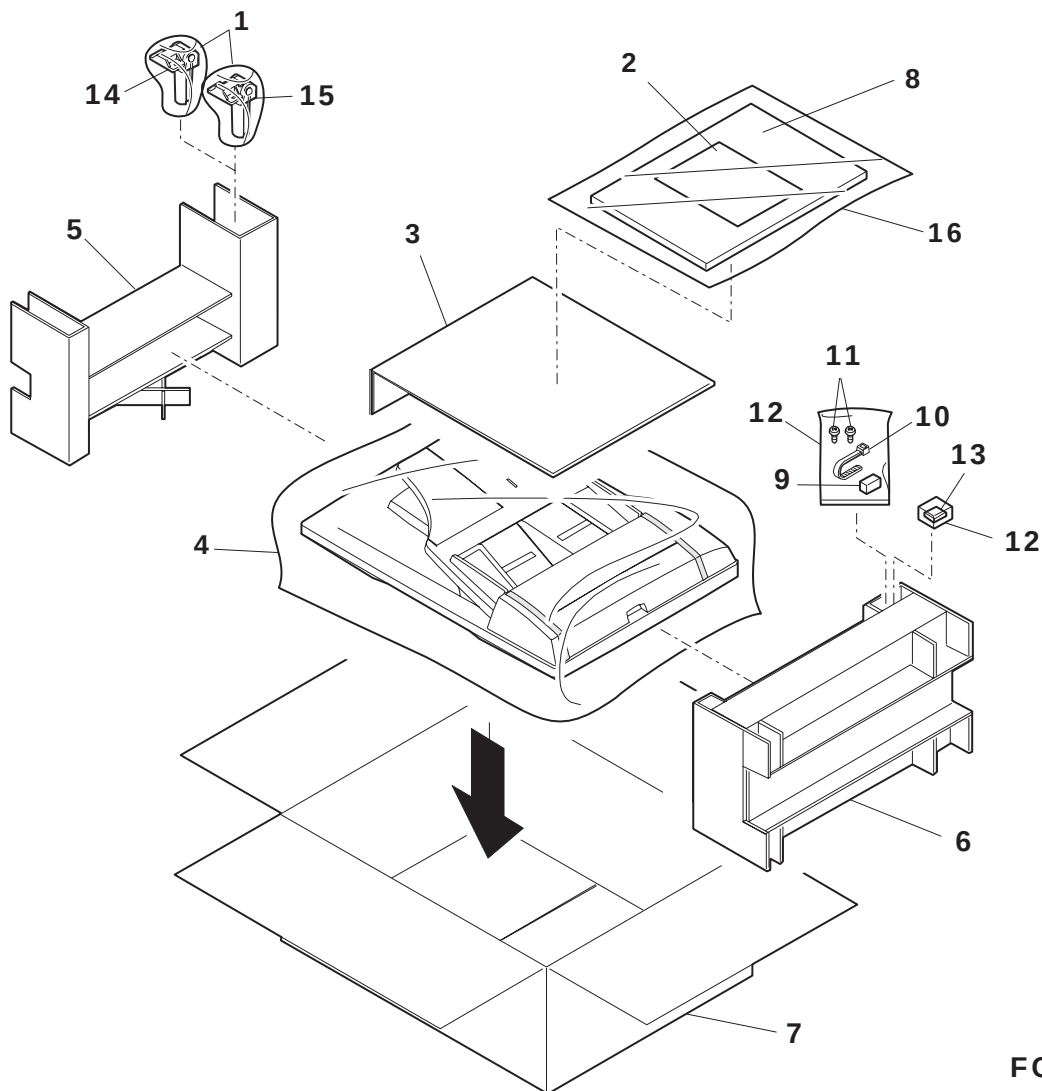


FCP03957

# 9 AR-SP3(Packing material & Accessories)

| NO. | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION           |
|-----|---------------|------------|----------|-----------|-----------------------|
| 1   | SSAKA0019SCZZ | AA         |          | D         | Vinyl bag (120×180mm) |
| 2   | TCADZ0075QSZZ | AE         | N        | D         | Card                  |
| 3   | SPAKA0221QSZZ | AE         | N        | D         | Spacer                |
| 4   | SSAKH3012KCZZ | AD         |          | D         | Vinyl bag (790×740mm) |
| 5   | SPAKA0219QSZZ | AP         | N        | D         | Packing add L         |
| 6   | SPAKA0220QSZZ | AQ         | N        | D         | Packing add R         |
| 7   | SPAKC0222QSZZ | AT         | N        | D         | Packing case          |
| 8   | PCUSS0010QSZ1 | AV         |          | C         | OC mat                |
| 9   | RCORF0022FCZZ | AQ         |          | C         | Ferrite core          |
| 10  | LBNDJ0013FCZ1 | AA         |          | C         | Band                  |
| 11  | XBBSE30P08000 | AA         |          | C         | Screw (3×8)           |
| 12  | SSAKA2011KCZZ | AA         |          | D         | Vinyl bag             |
| 13  | DUNT-0084QS11 | AU         |          | E         | DSPF sensor unit      |
| 14  | PGiDM0019QSZZ | AH         |          | C         | Hinge guide L         |
| 15  | PGiDM0020QSZZ | AH         |          | C         | Hinge guide R         |
| 16  | SSAKA3442QCZZ | AB         |          | D         | Vinyl bag (340×450mm) |
|     |               |            |          |           |                       |
|     |               |            |          |           |                       |
|     |               |            |          |           |                       |

# 9 AR-SP3(Packing material & Accessories)

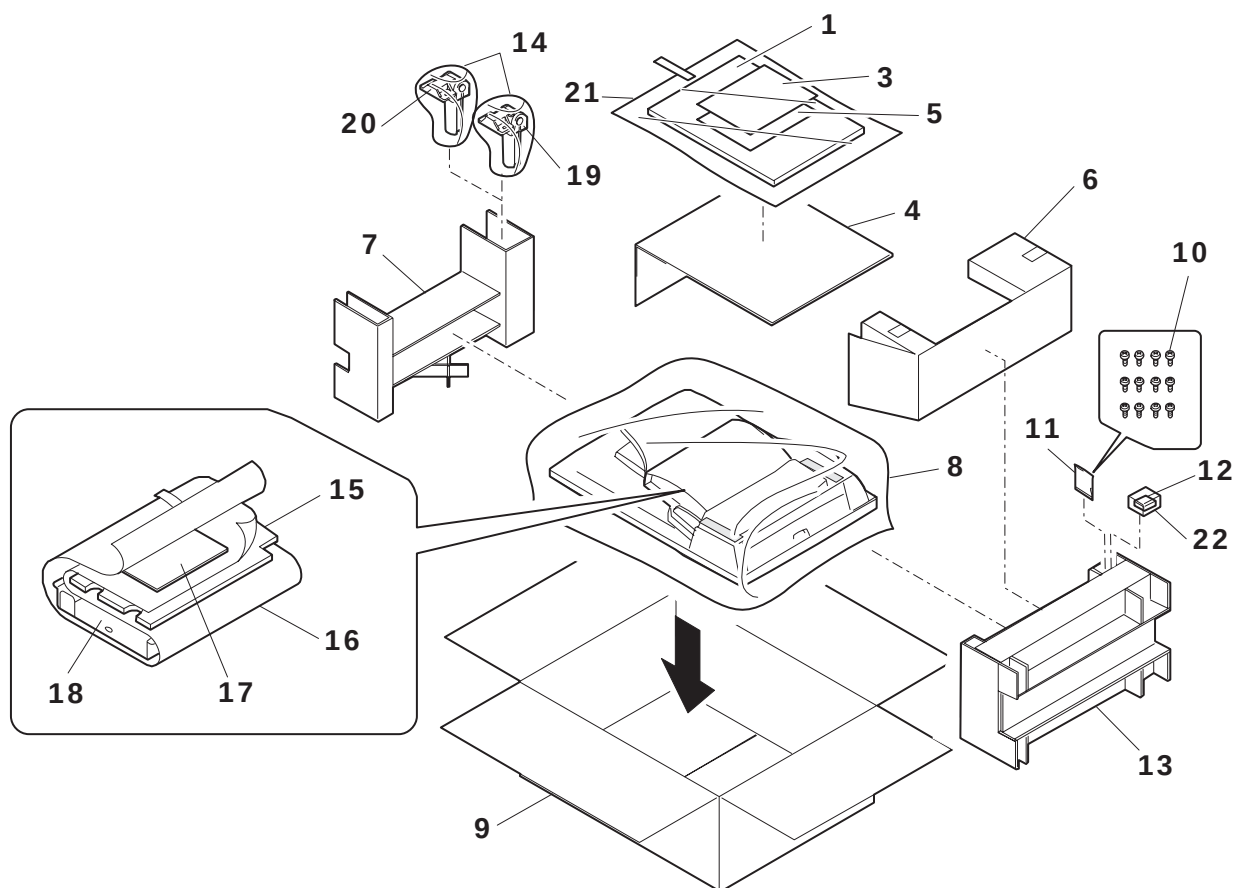


FCP03958

## 10 AR-FX3(Packing material &amp; Accessories)

| NO. | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION           |
|-----|---------------|------------|----------|-----------|-----------------------|
| 1   | PCUSS0010QSZ1 | AV         |          | C         | OC mat                |
| 3   | TCADZ0076QSZZ | AE         | N        | D         | Card                  |
| 4   | SPAKA0227QSZZ | AE         | N        | D         | Spacer B              |
| 5   | TINSE0258QSZZ | AX         | N        | D         | Operation manual      |
| 6   | SPAKA0226QSZZ | AE         | N        | D         | Spacer A              |
| 7   | SPAKA0224QSZZ | AQ         | N        | D         | Packing add L         |
| 8   | SSAKH3012KCZZ | AD         |          | D         | Vinyl bag (790×740mm) |
| 9   | SPAKC0229QSZZ | AT         | N        | D         | Packing case          |
| 10  | XHBSE30P08000 | AA         |          | C         | Screw (3×8)           |
| 12  | SSAKA2011KCZZ | AA         |          | D         | Vinyl bag             |
| 13  | SPAKA0225QSZZ | AQ         | N        | D         | Packing add R         |
| 14  | SSAKA0019SCZZ | AA         |          | D         | Vinyl bag (120×180mm) |
| 15  | SPAKA399ACCZZ | AB         |          | D         | Vinyl bag             |
| 16  | SPAKA0228QSZZ | AE         | N        | D         | Protect sheet         |
| 17  | PCOVP0046QSZZ | AF         |          | D         | Line cover A          |
| 18  | PCOVP0045QSZZ | AL         |          | D         | PWB cover             |
| 19  | PGIDM0019QSZZ | AH         |          | C         | Hinge guide L         |
| 20  | PGIDM0020QSZZ | AH         |          | C         | Hinge guide R         |
| 21  | SSAKA3442QCZZ | AB         |          | D         | Vinyl bag (340×450mm) |
| 22  | DUNT-0084QS11 | AU         |          | E         | DSPF sensor unit      |
| 101 | QCNW-7197XCZZ | AH         |          | B         | Line cable            |
| 102 | TLABH0152QSZZ | AD         | N        | C         | Label                 |
|     |               |            |          |           |                       |
|     |               |            |          |           |                       |
|     |               |            |          |           |                       |

## 10 AR-FX3(Packing material &amp; Accessories)

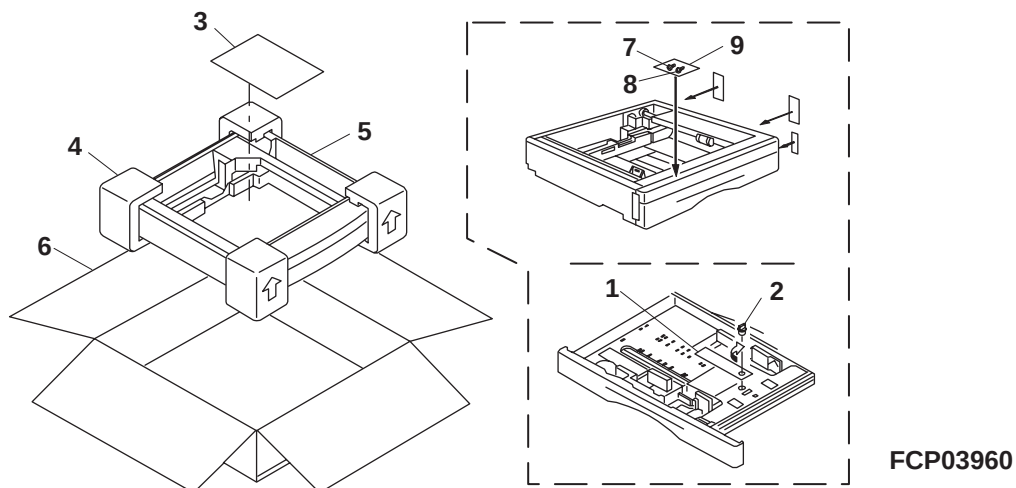


FCP3959

# 11 AR-DE9(Packing material & Accessories)

| NO. | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION       |
|-----|---------------|------------|----------|-----------|-------------------|
| 1   | TTAG-0002QSZZ | AB         | N        | C         | Tray rotation tag |
| 2   | LHLDW1226FCZZ | AB         |          | C         | Holder            |
| 3   | TCADZ0077QSZZ | AE         | N        | D         | Card              |
| 4   | SPAKA5108FCZZ | AF         |          | D         | Packing add       |
| 5   | SSAKH0021SCZZ | AC         |          | D         | Vinyl bag         |
| 6   | SPAKC0223QSZZ | AQ         | N        | D         | Packing case      |
| 7   | XEBSE40P12000 | AA         |          | C         | Screw (4×12)      |
| 8   | XEBSE40P16000 | AA         |          | C         | Screw (4×16)      |
| 9   | SSAKA2011KCZZ | AA         |          | D         | Vinyl bag         |

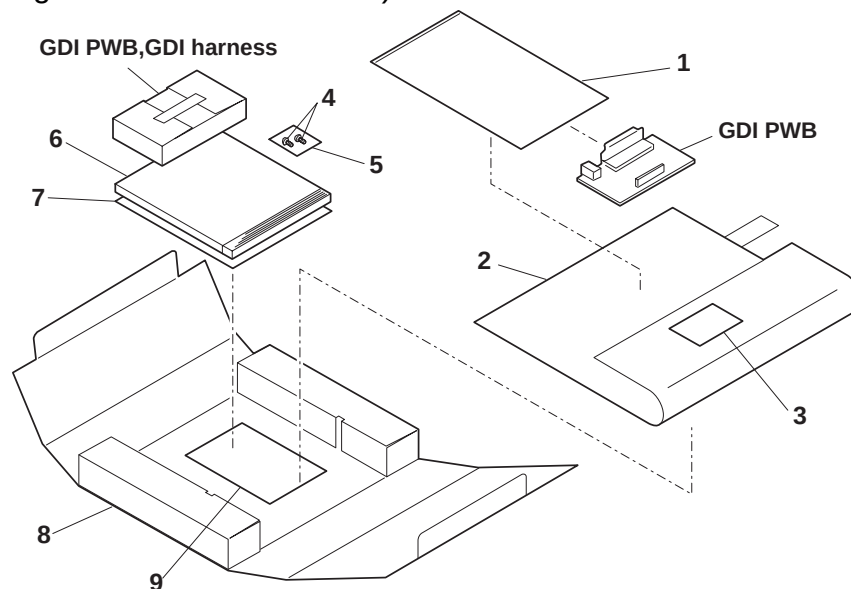
# 11 AR-DE9(Packing material & Accessories)



# 12 AR-PG1(Packing material & Accessories)

| NO. | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION           |
|-----|---------------|------------|----------|-----------|-----------------------|
| 1   | SPAK-548ECCZZ | AB         |          | D         | Vinyl bag (140×260mm) |
| 2   | SPAKA5824FCZZ | AF         | N        | D         | Protect sheet         |
| 3   | DHAI-0173QSZZ | AE         | N        | C         | GDAI harness          |
| 4   | XBBSE30P08000 | AA         |          | C         | Screw (3×8)           |
| 5   | SSAKA0019SCZZ | AA         |          | D         | Vinyl bag (120×180mm) |
| 6   | DUNT-0130QSZZ | AL         | N        | D         | CD-ROM                |
| 7   | TCADZ0078QSZZ | AH         | N        | D         | Card                  |
| 8   | SPAKC0231QSZZ | AG         |          | D         | Packing case          |
| 9   | TINSE0305QSZZ | AY         | N        | D         | Operation manual      |

# 12 AR-PG1(Packing material & Accessories)



FCP3961

## 13 AR-FX3(Fax panel PWB)

| NO.    | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION                                          |
|--------|---------------|------------|----------|-----------|------------------------------------------------------|
| 1      | PSPAF0013QSZZ | AD         |          | C         | LCD spacer                                           |
| 2      | QCNCM0811FCZZ | AC         |          | C         | Connector (9pin) [CN701]                             |
| 3      | QSW-P0005QSZZ | AC         |          | B         | Tact switch (B3F-6102) [S701~747]                    |
| 4      | RCRMZ0002QSZZ | AE         |          | C         | Crystal [Y701]                                       |
| 5      | RVR-B1440QCZZ | AF         |          | B         | Volume (RK09J11TO) [VR701]                           |
| 6      | VCCCTV1HH471J | AA         |          | C         | Capacitor (50WV 470pF) [C705~707]                    |
| 7      | VCEAJU1CW226M | AB         |          | C         | Capacitor (16WV 22μF) [C702,703]                     |
| 8      | VCKYTV1EB104K | AA         |          | C         | Capacitor (25WV 0.10μF) [C701,704,711,712,714~718]   |
| 9      | VHDDAN202U/-1 | AB         |          | B         | Diode (DAN202U) [D704,705]                           |
| 10     | VHDDAP202U/-1 | AB         |          | B         | Diode (DAP202U) [D706,707]                           |
| 11     | VHiHD4074344/ | AX         |          | B         | CPU (HD4074344) [IC701]                              |
| 12     | VHiNJM431U/-1 | AF         |          | B         | IC (NJM431U) [IC703]                                 |
| 13     | VHP1LHLE-002A | AC         |          | B         | LED (1LHLE-002A) [D701~703]                          |
| 14     | VRS-TP2BD000J | AA         |          | C         | Resistor (1/8W 0Ω ±5%) [J701~746]                    |
| 15     | VRS-TS2AD101J | AA         |          | C         | Resistor (1/10W 100Ω ±5%) [R750]                     |
| 16     | VRS-TS2AD102J | AA         |          | C         | Resistor (1/10W 1.0KΩ ±5%) [R716~729,740~742]        |
| 17     | VRS-TS2AD103J | AA         |          | C         | Resistor (1/10W 10KΩ ±5%) [R730]                     |
| 18     | VRS-TS2AD105J | AA         |          | C         | Resistor (1/10W 1MΩ ±5%) [R739]                      |
| 19     | VRS-TS2AD202J | AA         |          | C         | Resistor (1/10W 2KΩ ±5%) [R752]                      |
| 20     | VRS-TS2AD203J | AA         |          | C         | Resistor (1/10W 20KΩ ±5%) [R701~715,734~737,748,749] |
| 21     | VRS-TS2AD242F | AB         |          | C         | Resistor (1/10W 2.4KΩ ±1%) [R733]                    |
| 22     | VRS-TS2AD272F | AA         |          | C         | Resistor (1/10W 2.7KΩ ±1%) [R732]                    |
| 23     | VRS-TS2AD391J | AA         |          | C         | Resistor (1/10W 390Ω ±5%) [R745~747]                 |
| 24     | VRS-TX2HD511J | AB         | N        | C         | Resistor (1/2W 510Ω ±5%) [R731]                      |
| 25     | VSDTA143EK/-1 | AB         |          | B         | Transistor (DTA143EK) [Q701]                         |
| 26     | VVLHLM3212-01 | BA         |          | E         | (HLM3212) [IC702]                                    |
| (Unit) |               |            |          |           |                                                      |
| 901    | CPWBF0046QS51 | BH         |          | E         | Fax panel PWB                                        |
|        |               |            |          |           |                                                      |
|        |               |            |          |           |                                                      |
|        |               |            |          |           |                                                      |

## 14 AR-FX3(Fax PWB)

| NO. | PARTS CODE    | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION                                                                                     |
|-----|---------------|------------|----------|-----------|-------------------------------------------------------------------------------------------------|
| 1   | VHi27C08001QS | BA         | N        | B         | IC (27C08002QS) [IC502]                                                                         |
| 2   | PSHEZ0190QSZZ | AD         |          | C         | Sheet                                                                                           |
| 3   | QCNCM7022SC1J | AE         |          | C         | Connector [CN501]                                                                               |
| 4   | QCNCW0034QSZZ | AL         |          | C         | Connector [CN601]                                                                               |
| 5   | QJAKT7004XCZZ | AH         |          | C         | Connector [CN502]                                                                               |
| 6   | QSOCZ0051FCZZ | AD         |          | C         | IC socket (DICF-42C-E) [IC502]                                                                  |
| 7   | RC-DZ1080RC0L | AR         |          | C         | Capacitor (EECS5R5H105) [C515]                                                                  |
| 8   | RC-K1E104HCZT | AA         | N        | C         | Capacitor (25WV 0.1μF) [CN501~610]                                                              |
| 9   | RC-KZ1053RC1E | AC         |          | C         | Capacitor (25WV 1μF) [C656]                                                                     |
| 10  | RCiLZ0007QSZZ | AF         |          | C         | Choke coil [L521]                                                                               |
| 11  | RCiLZ1032CCZZ | AD         |          | C         | Coil (SBO-02SAN) [L501,503,504,505,511~516,522~526]                                             |
| 12  | RCiLZ1063YCZZ | AC         |          | C         | Coil (ACB1608M-60) [L608]                                                                       |
| 13  | RCiLZ7009XCZZ | AC         |          | C         | Coil (ACB2012M) [L601,603~605,609]                                                              |
| 14  | RCRSP6676RCZZ | AG         |          | B         | Crystal (32.768KHz) [Y501,502]                                                                  |
| 15  | RCRSZ0013QSZZ | AP         |          | B         | Crystal (49.192MHZ) [Y503]                                                                      |
| 17  | RFiLZ0002QSZZ | AG         |          | C         | Filter (LF1290-102) [L506,507]                                                                  |
| 18  | RFiLZ0005QSZZ | AC         | N        | C         | Filter (ZJ5501-470TK) [L502]                                                                    |
| 19  | RMPTW4103QCJJ | AB         |          | B         | Block resistor (10KΩ×4 1/32W ±5%) [BR549,550]                                                   |
| 20  | RMPTW4220QCJJ | AB         |          | B         | Block resistor (22Ω ×4) [BR501,502,507,510,513,514,520,521,522~525,527~541,543,545~548,551~554] |
| 21  | RMPTW4223QCJJ | AB         |          | B         | Block resistor (22KΩ×4) [BR508,509,542,544]                                                     |
| 22  | RMPTW4390QCJJ | AA         |          | B         | Block resistor (1/32W 39Ω×4) [BR503~506,511,512,555~561,526]                                    |
| 23  | RRLYD3213QCZZ | AH         |          | B         | Relay (OUAZ-SH-112) [RY501]                                                                     |
| 24  | RTRNZ0009QSZZ | AQ         |          | B         | Transformer [T501]                                                                              |
| 25  | UBATL2034SCZZ | AH         |          | B         | Battery (CR2354) [BT501]                                                                        |
| 26  | VCCCCY1EH102J | AB         |          | C         | Capacitor (1608Type/1000pF/CH) [C623]                                                           |
| 27  | VCCCCY1HH101J | AA         |          | C         | Capacitor (50WV 100pF) [C626,635]                                                               |
| 28  | VCCCCY1HH180J | AA         |          | C         | Capacitor (50WV 18pF) [C620]                                                                    |
| 29  | VCCCCY1HH201J | AA         |          | C         | Capacitor (50WV 200pF) [C639,650,655]                                                           |
| 30  | VCCCCY1HH220J | AA         |          | C         | Capacitor (50WV 22pF) [C613,614]                                                                |
| 31  | VCCCTQ1HH332J | AC         |          | C         | Capacitor (50WV 3300pF) [C624]                                                                  |
| 32  | VCCCTV1HH330J | AA         |          | C         | Capacitor (50WV 33pF)                                                                           |
| 33  | VCEAGA0JW107M | AC         |          | C         | Capacitor (16WV 100μF) [C546,557,559,561~563,569]                                               |
| 34  | VCEAGA1AW226M | AB         |          | C         | Capacitor (10WV 22μF) [C506,509,528,529,531,540,541,554,565,568,572,573]                        |
| 35  | VCEAGA1CW106M | AA         |          | C         | Capacitor (16WV 10μF) [C510,513,519,567]                                                        |
| 36  | VCEAGA1CW107M | AC         |          | C         | Capacitor (16WV 100μF) [C516,560,564]                                                           |
| 37  | VCEAGA1CW226M | AB         |          | C         | Capacitor (16WV 22μF) [C558]                                                                    |
| 38  | VCEAGA1CW476M | AB         |          | C         | Capacitor (16WV 47μF) [C566]                                                                    |
| 39  | VCFYEG2EA223M | AE         |          | C         | Capacitor (250WV 0.022μF) [C505]                                                                |
| 40  | VCFYJU2EA334K | AD         |          | C         | Capacitor (250WV 0.33μF) [C555]                                                                 |
| 41  | VCFYJU2EA824K | AE         |          | C         | Capacitor (250WV 0.82μF) [C517,571]                                                             |

## 14 AR-FX3(Fax PWB)

| NO. | PARTS CODE     | PRICE RANK | NEW MARK | PART RANK | DESCRIPTION                                                                                                |
|-----|----------------|------------|----------|-----------|------------------------------------------------------------------------------------------------------------|
| 42  | VCKYCY1CB333K  | AB         |          | C         | Capacitor (16WV 0.033μF) [C538]                                                                            |
| 43  | VCKYCY1CF104Z  | AA         |          | C         | Capacitor (16WV 0.10μF) [C501-504,507,508,511,512,514,520,521,523,524,527,532-537,542-545,547-553,556,570] |
| 44  | VCKYCY1EF104Z  | AA         |          | C         | Capacitor (25WV 0.10μF) [C601,602,608-610,612,615-619,625,628,630-634]                                     |
|     | VCKYCY1EF104Z  | AA         |          | C         | Capacitor (25WV 0.10μF) [C636-638,640-649,651-654,657-660,664]                                             |
| 45  | VCKYCY1HB103K  | AA         |          | C         | Capacitor (50WV 0.010μF) [C611,662,663]                                                                    |
| 46  | VCKYCY1HB331K  | AA         |          | C         | Capacitor (50WV 330pF) [C539]                                                                              |
| 47  | VCKYCY1HF473Z  | AA         |          | C         | Capacitor (50WV 0.047μF) [C629,627,661]                                                                    |
| 48  | VCQYNU1HM473K  | AB         |          | C         | Capacitor (50WV 0.047μF)                                                                                   |
| 49  | VCQYNU1HM332J  | AC         |          | C         | Capacitor (50WV 3300pF) [C530]                                                                             |
| 50  | VCQYNA1HM473K  | AA         |          | C         | Capacitor (50WV 0.047μF) [C575]                                                                            |
| 51  | VCQYNU1HM683J  | AC         |          | C         | Capacitor (50WV 0.068μF) [C522]                                                                            |
| 52  | VHDDAN202U/-1  | AB         |          | B         | Diode (DAN202U) [DA603,604]                                                                                |
| 53  | VHDDAP202U/-1  | AB         |          | B         | Diode (DAP202U) [DA601,602]                                                                                |
| 54  | VHDDSS133///-1 | AA         |          | B         | Diode (DSS133) [D504]                                                                                      |
| 55  | VHDEK14///-1   | AE         |          | B         | Diode (EK14) [D501,502,505]                                                                                |
| 56  | VHD1SS355///-1 | AB         |          | B         | Diode (1SS355) [D603-606]                                                                                  |
| 57  | VHD10E1///-1   | AA         |          | B         | Diode (10E1) [D503]                                                                                        |
| 58  | VHDBR501V40-1  | AD         |          | B         | Diode (RB501V-40) [D607]                                                                                   |
| 59  | VHEHZ27-1///-1 | AB         |          | B         | Zener diode (HZ27) [ZD502]                                                                                 |
| 60  | VHERD2.7EB2-1  | AB         |          | B         | Zener diode (RD2.7EB2) [ZD503,504]                                                                         |
| 61  | VHERD4.3EL3-1  | AB         |          | B         | Zener diode (RD4.3EL3) [ZD505,506]                                                                         |
| 62  | VHiBU4051BCF/  | AF         |          | B         | IC (BU4051BCF) [IC608]                                                                                     |
| 63  | VHiBU4053BCF1  | AE         |          | B         | IC (BU4053BCF1) [IC516,605]                                                                                |
| 64  | VHiCGS410///-1 | AU         |          | B         | IC (CGS410) [IC508]                                                                                        |
| 65  | VHiCG46533175  | BA         |          | B         | IC (CG46533175) [IC509]                                                                                    |
| 66  | VHiHY18164CSJ  | AZ         |          | B         | D RAM (HY18164CSJ) [IC504]                                                                                 |
| 67  | VHiLC8213K/-1  | AZ         |          | B         | IC (LC8213K) [IC505]                                                                                       |
| 68  | VHiLM311///-1F | AD         |          | B         | IC (LM311) [IC607]                                                                                         |
| 69  | VHiLM386M///-1 | AE         |          | B         | IC (LM386M) [IC609]                                                                                        |
| 70  | VHiLZ9FH19//   | AV         |          | B         | IC (LZ9F19) [IC506]                                                                                        |
| 71  | VHiMC34063P-1  | AN         |          | B         | IC (MC34063P) [IC513]                                                                                      |
| 72  | VHiNJM084M/-F  | AH         |          | B         | IC (NJM084M) [IC606]                                                                                       |
| 73  | VHiNJU6355E-1  | AM         |          | B         | IC (NJU6355E) [IC602]                                                                                      |
| 74  | VHiNSFX200-25  | BG         |          | B         | IC (NSFX200-25) [IC503]                                                                                    |
| 75  | VHiNS32FX164/  | BG         |          | B         | IC (NS32FX164) [IC507]                                                                                     |
| 76  | VHiTL431CLP-2  | AG         |          | B         | IC (TL431CLP-2) [IC514]                                                                                    |
| 77  | VHiULN2003ANS  | AE         |          | B         | IC (ULN2003ANS) [IC603]                                                                                    |
| 78  | VHiW24257A12J  | AN         |          | B         | IC (W24257A12J) [IC512]                                                                                    |
| 79  | VHiW2465S70LL  | AW         |          | B         | IC (W2465S70LL) [IC501]                                                                                    |
| 81  | VHiW166G//     | AT         | N        | B         | IC (W166G) [IC604]                                                                                         |
| 82  | VHi1816-6///-1 | AZ         |          | B         | IC (1816-6) [IC510,515]                                                                                    |
| 83  | VHi74VHC11//   | AF         |          | B         | IC (74VHC11) [IC601]                                                                                       |
| 84  | VHPPC814///-1  | AE         |          | B         | Photo coupler (PC814) [IS503]                                                                              |
| 85  | VHPPC817///-1  | AF         |          | B         | Photo coupler (PC817) [IS502]                                                                              |
| 86  | VHVR391PV6-1   | AE         |          | B         | Varistor (PA391PV6) [V501]                                                                                 |
| 87  | VHVTNR5V471K/  | AD         |          | B         | Varistor (TNR5V471K) [RV502,503]                                                                           |
| 88  | VRD-HT2EY330J  | AA         |          | B         | Resistor (1/4W 33Ω ±5%) [R522]                                                                             |
| 89  | VRD-HT2EY392J  | AA         |          | C         | Resistor (1/4W 3.9KΩ ±5%) [R626]                                                                           |
| 90  | VRD-HT2EY4R7J  | AA         |          | C         | Resistor (1/4W 4.7Ω ±5%) [R521]                                                                            |
| 91  | VRD-HT2HY101J  | AA         |          | C         | Resistor (1/2W 100Ω ±5%) [R501,513]                                                                        |
| 92  | VRD-HT2HY153J  | AB         |          | C         | Resistor (1/2W 15KΩ ±5%) [R510,512]                                                                        |
| 93  | VRD-HT2HY4R7J  | AA         |          | C         | Resistor (1/2W 4.7Ω ±5%) [R509]                                                                            |
| 94  | VRD-HT2HY561J  | AA         |          | C         | Resistor (1/2W 560Ω ±5%) [R503]                                                                            |
| 95  | VRS-CY1JD000J  | AA         |          | C         | Resistor (1/16W 0Ω ±5%) [R621,633,670,728,730,732]                                                         |
| 96  | VRS-CY1JD100J  | AA         |          | C         | Resistor (1/16W 10Ω ±5%) [R725]                                                                            |
| 97  | VRS-CY1JD101J  | AA         |          | C         | Resistor (1/16W 100Ω ±5%) [R607,622,666]                                                                   |
| 98  | VRS-CY1JD102J  | AA         |          | C         | Resistor (1/16W 1.0KΩ ±5%) [R647,664,673,703]                                                              |
| 99  | VRS-CY1JD103J  | AA         |          | C         | Resistor (1/16W 10KΩ ±5%) [R511,514,605,620,624,627,644,661,663,665,669,675-691,693,695-700]               |
|     | VRS-CY1JD103J  | AA         |          | C         | Resistor (1/16W 10KΩ ±5%) [R704,705,717-719,726,727,729,733,734]                                           |
| 100 | VRS-CY1JD104J  | AA         |          | C         | Resistor (1/16W 100KΩ ±5%) [R614]                                                                          |
| 101 | VRS-CY1JD105J  | AA         |          | C         | Resistor (1/16W 1.0MΩ ±5%) [R619]                                                                          |
| 102 | VRS-CY1JD106J  | AA         |          | C         | Resistor (1/16W 10MΩ ±5%) [R618]                                                                           |
| 103 | VRS-CY1JD121J  | AA         |          | C         | Resistor (1/16W 120Ω ±5%) [R723]                                                                           |
| 104 | VRS-CY1JD123J  | AA         |          | C         | Resistor (1/16W 12KΩ ±5%) [R628,708]                                                                       |
| 105 | VRS-CY1JD181J  | AA         |          | C         | Resistor (1/16W 180Ω ±5%) [R505-508,623,645,646,648,649,650,660,662,668]                                   |
| 106 | VRS-CY1JD182J  | AA         |          | C         | Resistor (1/16W 1.8KΩ ±5%) [R714]                                                                          |
| 107 | VRS-CY1JD221J  | AA         |          | C         | Resistor (1/16W 220Ω ±5%) [R671,667,720]                                                                   |
| 108 | VRS-CY1JD222J  | AA         |          | C         | Resistor (1/16W 2.2KΩ ±5%) [R604,712]                                                                      |
| 109 | VRS-CY1JD223J  | AA         |          | C         | Resistor (1/16W 22KΩ ±5%) [R520,631,653,694,707]                                                           |
| 110 | VRS-CY1JD330J  | AA         |          | C         | Resistor (1/16W 33Ω ±5%) [R630,639,640,641,642]                                                            |
| 111 | VRS-CY1JD331J  | AA         |          | C         | Resistor (1/16W 330Ω ±5%) [R638,643,706,711]                                                               |
| 112 | VRS-CY1JD390J  | AA         |          | C         | Resistor (1/16W 39Ω ±5%) [R613,615,616,617,625,722,724]                                                    |
| 113 | VRS-CY1JD333J  | AA         |          | C         | Resistor (1/16W 33KΩ ±5%) [R610]                                                                           |
| 114 | VRS-CY1JD472J  | AA         |          | C         | Resistor (1/16W 4.7KΩ ±5%) [R606,609]                                                                      |
| 115 | VRS-CY1JD473J  | AA         |          | C         | Resistor (1/16W 47KΩ ±5%) [R515,611,612]                                                                   |
| 116 | VRS-CY1JD511J  | AA         |          | C         | Resistor (1/16W 510Ω ±5%) [R716]                                                                           |
| 117 | VRS-CY1JD512J  | AA         |          | C         | Resistor (1/16W 5.1KΩ ±5%) [R517,603]                                                                      |
| 118 | VRS-CY1JD562J  | AA         |          | C         | Resistor (1/16W 5.6KΩ ±5%) [R516]                                                                          |

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| 【C】           |        |            |          |           |  |
| CBTN-0037QS01 | 5- 8   | AK         |          | C         |  |
| CBTN-0040QS01 | 5- 6   | AH         |          | C         |  |
| CBTN-0041QS01 | 5- 5   | AH         |          | C         |  |
| CCAB-0027QS01 | 5- 2   | AS         |          | C         |  |
| CFRM-0009QS53 | 7- 17  | BE         |          | E         |  |
| "             | 8-901  | BE         |          | E         |  |
| CFRM-0011QS51 | 1- 11  | BE         |          | E         |  |
| "             | 2-901  | BE         |          | E         |  |
| CFRM-0013QS51 | 1- 14  | BS         |          | E         |  |
| "             | 3-901  | BS         |          | E         |  |
| CPWBF0009QS51 | 2- 7   | AG         |          | E         |  |
| CPWBF0009QS52 | 5- 40  | AU         |          | E         |  |
| CPWBF0046QS51 | 5- 9   | BH         |          | E         |  |
| "             | 13-901 | BH         |          | E         |  |
| CPWBX0040QS53 | 14-901 | CE         |          | E         |  |
| CROLPO015QS01 | 8- 25  | AU         |          | C         |  |
| CSOU-0004QS51 | 1-501  | BC         |          | E         |  |
| 【D】           |        |            |          |           |  |
| DHAi-0053QSZZ | 7- 18  | AM         |          | C         |  |
| DHAi-0054QSZZ | 3- 9   | AR         |          | C         |  |
| DHAi-0055QSZZ | 2- 8   | AK         |          | C         |  |
| DHAi-0084QSZ1 | 3- 8   | AT         |          | C         |  |
| DHAi-0158QSZZ | 8- 14  | AN         |          | C         |  |
| DHAi-0159QSZ1 | 5- 39  | AN         |          | C         |  |
| DHAi-0160QSZZ | 5- 37  | AH         |          | C         |  |
| DHAi-0161QSZZ | 6- 34  | BA         |          | C         |  |
| DHAi-0162QSZZ | 6- 47  | AE         |          | C         |  |
| DHAi-0173QSZZ | 12- 3  | AE         | N        | C         |  |
| DUNT-0084QS11 | 9- 13  | AU         |          | E         |  |
| "             | 10- 22 | AU         |          | E         |  |
| DUNT-0130QSZ1 | 12- 6  | AL         | N        | D         |  |
| 【G】           |        |            |          |           |  |
| GCAB-0008QSZZ | 2- 1   | AM         |          | D         |  |
| GCOVA0005QSZZ | 7- 1   | AM         |          | D         |  |
| GCOVA0006QSZZ | 7- 3   | AN         |          | D         |  |
| GCOVA0007QSZZ | 7- 10  | AK         |          | D         |  |
| GCOVA0008QSZZ | 7- 14  | AK         |          | D         |  |
| GLEGG0064FCZZ | 7- 7   | AC         |          | D         |  |
| 【J】           |        |            |          |           |  |
| JBTN-0036QSZZ | 5- 7   | AF         |          | C         |  |
| JBTN-0038QSZZ | 5- 4   | AF         |          | C         |  |
| JBTN-0039QSZZ | 5- 3   | AE         |          | C         |  |
| JKNBZ0004QSZZ | 3- 28  | AD         |          | C         |  |
| "             | 6- 35  | AD         |          | C         |  |
| 【L】           |        |            |          |           |  |
| LANGT0004QSZZ | 4- 8   | AC         |          | C         |  |
| LANGT0005QSZZ | 4- 1   | AD         |          | C         |  |
| LBNDJ0013FCZ1 | 1- 15  | AA         |          | C         |  |
| "             | 3- 10  | AA         |          | C         |  |
| "             | 4- 6   | AA         |          | C         |  |
| "             | 6- 14  | AA         |          | C         |  |
| "             | 8- 31  | AA         |          | C         |  |
| "             | 9- 10  | AA         |          | C         |  |
| LBOSZ1031FCZZ | 8- 7   | AC         |          | C         |  |
| LBOSZ1508FCZZ | 2- 19  | AG         |          | C         |  |
| "             | 5- 14  | AG         |          | C         |  |
| LBSHZ0303FCZZ | 2- 20  | AC         |          | C         |  |
| "             | 5- 18  | AC         |          | C         |  |
| LFRM-0009QSZZ | 8- 26  | AQ         |          | D         |  |
| LFRM-0011QSZ1 | 2- 35  | AL         | N        | C         |  |
| LFRM-0012QSZZ | 3- 20  | AD         |          | C         |  |
| "             | 6- 26  | AD         |          | C         |  |
| LFRM-0013QSZZ | 3- 12  | AG         |          | C         |  |
| "             | 6- 10  | AG         |          | C         |  |
| LFRM-0033QSZZ | 5- 28  | AP         |          | C         |  |
| LHLDW1226FCZZ | 11- 2  | AB         |          | C         |  |
| LPLTM0036QSZZ | 7- 6   | AF         |          | C         |  |
| LPLTM0096QSZZ | 1- 30  | AF         |          | C         |  |
| "             | 4- 30  | AF         |          | C         |  |
| LPLTM0146QSZZ | 6- 1   | AD         |          | C         |  |
| LPLTP0011QSZZ | 1- 2   | AH         |          | C         |  |
| LPLTP0012QSZZ | 1- 3   | AH         |          | C         |  |
| LPLTP0013QSZZ | 3- 22  | AD         |          | C         |  |
| "             | 6- 43  | AD         |          | C         |  |
| LPLTP0139QSZZ | 4- 44  | AF         |          | C         |  |
| LPLTP0140QSZZ | 4- 42  | AF         |          | C         |  |
| LPLTP0150QSZZ | 5- 26  | AG         |          | C         |  |

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| LSOU-0004QSZZ | 1- 1  | AX         |          | D         |  |
| LSOU-0005QSZZ | 1- 33 | BB         |          | D         |  |
| "             | 4- 34 | BB         |          | D         |  |
| LSOU-0020QSZZ | 4- 43 | AT         |          | C         |  |
| LSTPP0001QSZZ | 2- 5  | AD         |          | C         |  |
| LSTPP0008QSZZ | 5- 20 | AD         |          | C         |  |
| LX-BZ0012QSZZ | 3- 3  | AC         |          | C         |  |
| "             | 6- 13 | AC         |          | C         |  |
| LX-BZ0016QSZZ | 1- 31 | AC         |          | C         |  |
| "             | 4- 31 | AC         |          | C         |  |
| 【M】           |       |            |          |           |  |
| MARMP0001QSZZ | 3- 5  | AF         |          | C         |  |
| "             | 6- 11 | AF         |          | C         |  |
| MARMP0002QSZZ | 2- 13 | AD         |          | C         |  |
| "             | 5- 25 | AD         |          | C         |  |
| MARMP0003QSZ1 | 2- 4  | AD         |          | C         |  |
| "             | 5- 19 | AD         |          | C         |  |
| MARMP0004QSZZ | 2- 34 | AF         |          | C         |  |
| "             | 5- 42 | AF         |          | C         |  |
| MARMP0012QSZZ | 7- 13 | AD         |          | C         |  |
| MARMP0229FCZZ | 8- 12 | AE         |          | C         |  |
| MHNG-0003QSYZ | 4- 32 | AX         |          | C         |  |
| MHNG-0003QSZZ | 1- 21 | AX         |          | C         |  |
| MHNG-0004QSZZ | 1- 32 | AX         |          | C         |  |
| "             | 4- 28 | AX         |          | C         |  |
| MLEVP0009QSZZ | 2- 9  | AD         |          | C         |  |
| "             | 5- 22 | AD         |          | C         |  |
| MLEVP0010QSZZ | 2- 10 | AE         |          | C         |  |
| "             | 5- 23 | AE         |          | C         |  |
| MLEVP0011QSZ1 | 5- 27 | AE         |          | C         |  |
| MLEVP0033QSZZ | 8- 16 | AF         |          | C         |  |
| MLEVP0050QSZZ | 8- 27 | AD         |          | C         |  |
| MSPRC0062QSZZ | 3- 23 | AC         |          | C         |  |
| "             | 6- 45 | AC         |          | C         |  |
| MSPRC0063QSZZ | 3- 29 | AB         |          | C         |  |
| "             | 6- 28 | AB         |          | C         |  |
| MSPRC0115QSZZ | 2- 33 | AB         |          | C         |  |
| "             | 5- 44 | AB         |          | C         |  |
| MSPRC0149QSZZ | 1- 37 | AC         |          | C         |  |
| "             | 4- 27 | AC         |          | C         |  |
| MSPRC0161QSZZ | 8- 8  | AF         |          | C         |  |
| MSPRC1316FCZ1 | 2- 18 | AE         |          | C         |  |
| "             | 5- 15 | AE         |          | C         |  |
| MSPRC2544FCZZ | 7- 9  | AC         |          | C         |  |
| MSPRC2545FCZZ | 8- 13 | AB         |          | C         |  |
| MSPRC2546FCZZ | 8- 21 | AB         |          | C         |  |
| MSPRD0058QSZZ | 8- 17 | AG         |          | C         |  |
| MSPRD0114QSZ1 | 2- 36 | AD         |          | C         |  |
| MSPRD0159QSZZ | 8- 28 | AC         |          | C         |  |
| MSPRP0059QSZZ | 1- 7  | AD         |          | C         |  |
| "             | 4- 37 | AD         |          | C         |  |
| MSPRP0060QSZZ | 1- 27 | AD         |          | C         |  |
| "             | 4- 26 | AD         |          | C         |  |
| MSPRP0065QSZZ | 3- 24 | AD         |          | C         |  |
| "             | 6- 41 | AD         |          | C         |  |
| MSPRP0113QSZ1 | 1- 18 | AD         |          | C         |  |
| "             | 4- 15 | AD         |          | C         |  |
| MSPRT0061QSZZ | 1- 26 | AC         |          | C         |  |
| "             | 4- 24 | AC         |          | C         |  |
| MSPRT0064QSZ1 | 3- 11 | AC         |          | C         |  |
| "             | 6- 15 | AC         |          | C         |  |
| MSPRT0066QSZ1 | 2- 25 | AC         |          | C         |  |
| "             | 5- 30 | AC         |          | C         |  |
| MSPRT0067QSZ1 | 2- 14 | AB         |          | C         |  |
| "             | 5- 24 | AB         |          | C         |  |
| MSPRT0112QSZ1 | 7- 12 | AC         |          | C         |  |
| 【N】           |       |            |          |           |  |
| NBLTT0003QSZZ | 3- 27 | AG         |          | B         |  |
| "             | 6- 37 | AG         |          | B         |  |
| NBLTT0006QSZZ | 3- 15 | AG         |          | B         |  |
| "             | 6- 18 | AG         |          | B         |  |
| NBRGC0098FCZZ | 3- 18 | AC         |          | C         |  |
| "             | 6- 23 | AC         |          | C         |  |
| NBRGM5006BCZZ | 3- 19 | AB         |          | C         |  |
| "             | 6- 25 | AB         |          | C         |  |
| NBRGZ1043HCZZ | 8- 2  | AD         |          | C         |  |
| NGERH0041QSZZ | 8- 22 | AF         |          | C         |  |
| NGERH0047QSZZ | 3- 16 | AF         |          | C         |  |
| "             | 6- 21 | AF         |          | C         |  |
| NGERH0073QSZZ | 2- 16 | AE         |          | C         |  |
| "             | 5- 17 | AE         |          | C         |  |

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| NGERH0193FCZZ | 1- 6   | AB         |          | C         |  |
| "             | 4- 36  | AB         |          | C         |  |
| NGERH0972FCZZ | 3- 4   | AB         |          | C         |  |
| "             | 6- 12  | AB         |          | C         |  |
| NGERH0990FCZZ | 2- 28  | AB         |          | C         |  |
| "             | 5- 51  | AB         |          | C         |  |
| "             | 8- 23  | AB         |          | C         |  |
| NGERH0992FCZZ | 2- 30  | AB         |          | C         |  |
| "             | 5- 45  | AB         |          | C         |  |
| "             | 8- 5   | AB         |          | C         |  |
| NGERH1132FCZZ | 8- 10  | AH         |          | C         |  |
| NGERH1207FCZZ | 8- 11  | AF         |          | C         |  |
| NGERR0377FCZZ | 1- 4   | AD         |          | C         |  |
| "             | 4- 41  | AD         |          | C         |  |
| NPLYZ0010QSZZ | 2- 23  | AE         |          | C         |  |
| "             | 5- 32  | AE         |          | C         |  |
| NPLYZ0146FCZZ | 3- 26  | AB         |          | C         |  |
| "             | 6- 38  | AB         |          | C         |  |
| NRÖLM0022QSZZ | 3- 36  | AP         |          | C         |  |
| "             | 6- 30  | AP         |          | C         |  |
| NRÖLM0023QSZZ | 3- 32  | AP         |          | C         |  |
| "             | 6- 29  | AP         |          | C         |  |
| NRÖLP0010QSZZ | 1- 28  | AD         |          | C         |  |
| "             | 4- 23  | AD         |          | C         |  |
| NRÖLP0011QSZZ | 1- 23  | AD         |          | C         |  |
| "             | 4- 18  | AD         |          | C         |  |
| NRÖLP0019QSZ1 | 8- 1   | AP         |          | C         |  |
| NRÖLP0024QSZZ | 2- 27  | AL         |          | C         |  |
| "             | 5- 49  | AL         |          | C         |  |
| NRÖLP1060FCZZ | 7- 11  | AF         |          | C         |  |
| NRÖLR0922FCZZ | 2- 31  | AR         |          | C         |  |
| "             | 5- 46  | AR         |          | C         |  |
| NSFTZ0009QSZZ | 1- 29  | AE         |          | C         |  |
| "             | 4- 21  | AE         |          | C         |  |
| NSFTZ0010QSZZ | 1- 25  | AE         |          | C         |  |
| "             | 4- 20  | AE         |          | C         |  |
| NSFTZ0011QSZZ | 2- 32  | AG         |          | C         |  |
| "             | 5- 48  | AG         |          | C         |  |
| NSFTZ0012QSZZ | 2- 21  | AG         |          | C         |  |
| "             | 5- 12  | AG         |          | C         |  |
| [P]           |        |            |          |           |  |
| PBRSR0003QSZZ | 3- 33  | AL         |          | B         |  |
| "             | 6- 33  | AL         |          | B         |  |
| PCÖVP0036QSZZ | 1- 8   | AK         |          | D         |  |
| "             | 4- 35  | AK         |          | D         |  |
| PCÖVP0037QSZZ | 3- 37  | AH         |          | D         |  |
| PCÖVP0038QSZZ | 3- 38  | AL         |          | D         |  |
| PCÖVP0042QSZZ | 6- 8   | AH         |          | C         |  |
| PCÖVP0043QSZZ | 6- 7   | AL         |          | C         |  |
| PCÖVP0045QSZZ | 10- 18 | AL         |          | D         |  |
| PCÖVP0046QSZZ | 10- 17 | AF         |          | D         |  |
| PCUSS0010QSZ1 | 1- 34  | AV         |          | C         |  |
| "             | 4- 33  | AV         |          | C         |  |
| "             | 9- 8   | AV         |          | C         |  |
| "             | 10- 1  | AV         |          | C         |  |
| PFiLW0009QSZZ | 5- 1   | AL         |          | C         |  |
| PGiDH0029QSZZ | 3- 34  | AL         |          | C         |  |
| "             | 6- 32  | AL         |          | C         |  |
| PGiDM0015QSZZ | 7- 8   | AY         |          | C         |  |
| PGiDM0016QSZZ | 7- 4   | AY         |          | C         |  |
| PGiDM0019QSZZ | 9- 14  | AH         |          | C         |  |
| "             | 10- 19 | AH         |          | C         |  |
| PGiDM0020QSZZ | 9- 15  | AH         |          | C         |  |
| "             | 10- 20 | AH         |          | C         |  |
| PGiDM0024QSZZ | 4- 4   | AQ         |          | C         |  |
| "             | 6- 27  | AQ         |          | C         |  |
| PGiDM0024QSZZ | 3- 30  | AQ         |          | C         |  |
| PGiDM0042QSZZ | 3- 1   | AL         |          | C         |  |
| PGiDM0058QSZZ | 6- 3   | AK         |          | C         |  |
| PPiPP0007QSZZ | 8- 9   | AD         |          | C         |  |
| PPiPP0008QSZZ | 2- 17  | AD         |          | C         |  |
| "             | 5- 16  | AD         |          | C         |  |
| PSHEP0037QSZ1 | 1- 19  | AE         |          | C         |  |
| "             | 4- 16  | AE         |          | C         |  |
| PSHEP0038QSZZ | 1- 16  | AE         |          | C         |  |
| "             | 4- 12  | AE         |          | C         |  |
| PSHEP0044QSZZ | 3- 35  | AF         |          | C         |  |
| PSHEP0063QSZZ | 1- 17  | AC         |          | C         |  |
| "             | 4- 13  | AC         |          | C         |  |
| PSHEP3029FCZZ | 3- 14  | AA         |          | C         |  |
| "             | 6- 20  | AA         |          | C         |  |

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| PSHEZ0039QSZZ  | 3- 21  | AG         |          | C         |  |
| "              | 6- 44  | AG         |          | C         |  |
| PSHEZ0102QSZZ  | 1- 35  | AD         |          | C         |  |
| "              | 4- 14  | AD         |          | C         |  |
| PSHEZ0112QSZZ  | 1- 36  | AE         |          | C         |  |
| "              | 4- 22  | AE         |          | C         |  |
| PSHEZ0164QSZZ  | 6- 31  | AF         |          | C         |  |
| PSHEZ0190QSZZ  | 14- 2  | AD         |          | C         |  |
| PSHEZ2174FCZZ  | 3- 25  | AB         |          | C         |  |
| "              | 6- 42  | AB         |          | C         |  |
| PSPAF0013QSZZ  | 13- 1  | AD         |          | C         |  |
| PSPO-0001QSZZ  | 1- 24  | AB         |          | C         |  |
| "              | 4- 19  | AB         |          | C         |  |
| PSPO-0002QSZZ  | 2- 2   | AC         |          | C         |  |
| PSPO-0006QSZ1  | 5- 11  | AB         |          | C         |  |
| PTME-0008QSZZ  | 8- 20  | AD         |          | C         |  |
| PTME-0019QSZZ  | 2- 26  | AD         |          | B         |  |
| "              | 5- 29  | AD         |          | B         |  |
| PTUBP0119FCZZ  | 6- 50  | AB         |          | C         |  |
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| QCNCM0811FCZZ  | 13- 2  | AC         |          | C         |  |
| QCNCM7022SC1J  | 14- 3  | AE         |          | C         |  |
| QCNCW0034QSZZ  | 14- 4  | AL         |          | C         |  |
| QCNCW0946FCZZ  | 15- 1  | AH         |          | C         |  |
| QCNCW1124LC3A  | 15- 2  | AE         |          | C         |  |
| QCNCW7045XCZZ  | 15- 3  | AG         |          | C         |  |
| QCNCW-7197XCZZ | 10-101 | AH         |          | B         |  |
| QJAKT7004XCZZ  | 14- 5  | AH         |          | C         |  |
| QSÖCZ0051FCZZ  | 14- 6  | AD         |          | C         |  |
| QSW-B0003QSZZ  | 8- 24  | AF         |          | B         |  |
| QSW-P0005QSZZ  | 13- 3  | AC         |          | B         |  |
| [R]            |        |            |          |           |  |
| RC-DZ1080RC0L  | 14- 7  | AR         |          | C         |  |
| RC-K1E104HCZT  | 14- 8  | AA         | N        | C         |  |
| RC-KZ1053RC1E  | 14- 9  | AC         |          | C         |  |
| RCiLZ0007QSZZ  | 14- 10 | AF         |          | C         |  |
| RCiLZ1032CCZZ  | 14- 11 | AD         |          | C         |  |
| "              | 15- 4  | AD         |          | C         |  |
| RCiLZ1063YCZZ  | 14- 12 | AC         |          | C         |  |
| RCiLZ7009XCZZ  | 14- 13 | AC         |          | C         |  |
| RCÖRF0022FCZZ  | 9- 9   | AQ         |          | C         |  |
| RCÖRF1023LCZZ  | 3- 40  | AL         |          | C         |  |
| RCRMZ0002QSZZ  | 13- 4  | AE         |          | C         |  |
| RCSRSP6676RCZZ | 14- 14 | AG         |          | B         |  |
| RCRSZ0013QSZZ  | 14- 15 | AP         |          | B         |  |
| RCRSZ7011XCZZ  | 15- 5  | AE         |          | B         |  |
| RDTCT0004QSZZ  | 3- 31  | AL         |          | B         |  |
| "              | 6- 46  | AL         |          | B         |  |
| RFiLZ0002QSZZ  | 14- 17 | AG         |          | C         |  |
| RFiLZ0005QSZZ  | 14- 18 | AC         | N        | C         |  |
| RMÖTP0013QSZZ  | 3- 7   | BB         |          | B         |  |
| "              | 6- 9   | BB         |          | B         |  |
| RMPTW4103QCJJ  | 14- 19 | AB         |          | B         |  |
| RMPTW4220QCJJ  | 14- 20 | AB         |          | B         |  |
| RMPTW4223QCJJ  | 14- 21 | AB         |          | B         |  |
| RMPTW4390QCJJ  | 14- 22 | AA         |          | B         |  |
| RPLU-0004QSZ1  | 2- 11  | AQ         |          | B         |  |
| RPLU-0010QSZZ  | 8- 18  | AN         |          | B         |  |
| RPLU-0017QSZZ  | 5- 21  | AQ         |          | B         |  |
| RRLYD3213QCZZ  | 14- 23 | AH         |          | B         |  |
| RTRNZ0009QSZZ  | 14- 24 | AQ         |          | B         |  |
| RVR-B1440QCZZ  | 13- 5  | AF         |          | B         |  |
| [S]            |        |            |          |           |  |
| SPAK-548ECCZZ  | 12- 1  | AB         |          | D         |  |
| SPAKA0219QSZZ  | 9- 5   | AP         | N        | D         |  |
| SPAKA0220QSZZ  | 9- 6   | AQ         | N        | D         |  |
| SPAKA0221QSZZ  | 9- 3   | AE         | N        | D         |  |
| SPAKA0224QSZZ  | 10- 7  | AQ         | N        | D         |  |
| SPAKA0225QSZZ  | 10- 13 | AQ         | N        | D         |  |
| SPAKA0226QSZZ  | 10- 6  | AE         | N        | D         |  |
| SPAKA0227QSZZ  | 10- 4  | AE         | N        | D         |  |
| SPAKA0228QSZZ  | 10- 16 | AE         | N        | D         |  |
| SPAKA399ACCZZ  | 10- 15 | AB         |          | D         |  |
| SPAKA5108FCZZ  | 11- 4  | AF         |          | D         |  |
| SPAKA5824FCZZ  | 12- 2  | AF         | N        | D         |  |
| SPAKC0222QSZZ  | 9- 7   | AT         | N        | D         |  |
| SPAKC0223QSZZ  | 11- 6  | AQ         | N        | D         |  |
| SPAKC0229QSZZ  | 10- 9  | AT         | N        | D         |  |
| SPAKC0231QSZZ  | 12- 8  | AG         |          | D         |  |
| SSAKA0019SCZZ  | 9- 1   | AA         |          | D         |  |
| "              | 10- 14 | AA         |          | D         |  |

| PARTS CODE     | NO.    | PRICE RANK | NEW MARK | PART RANK |  |
|----------------|--------|------------|----------|-----------|--|
| SSAKA0019SCZZ  | 12- 5  | AA         |          | D         |  |
| SSAKA2011KCZZ  | 9- 12  | AA         |          | D         |  |
| "              | 10- 12 | AA         |          | D         |  |
| "              | 11- 9  | AA         |          | D         |  |
| SSAKA3442QCZZ  | 9- 16  | AB         |          | D         |  |
| "              | 10- 21 | AB         |          | D         |  |
| SSAKH0021SCZZ  | 11- 5  | AC         |          | D         |  |
| SSAKH3012KCZZ  | 9- 4   | AD         |          | D         |  |
| "              | 10- 8  | AD         |          | D         |  |
| 【T】            |        |            |          |           |  |
| TCADZ0075QSZZ  | 9- 2   | AE         | N        | D         |  |
| TCADZ0076QSZZ  | 10- 3  | AE         | N        | D         |  |
| TCADZ0077QSZZ  | 11- 3  | AE         | N        | D         |  |
| TCADZ0078QSZZ  | 12- 7  | AH         | N        | D         |  |
| TINSE0258QSZZ  | 10- 5  | AX         | N        | D         |  |
| TINSE0305QSZZ  | 12- 9  | AY         | N        | D         |  |
| TLABH0152QSZZ  | 10-102 | AD         | N        | C         |  |
| TTAG-0002QSZZ  | 11- 1  | AB         | N        | C         |  |
| 【U】            |        |            |          |           |  |
| UBATL2034SCZZ  | 14- 25 | AH         |          | B         |  |
| 【V】            |        |            |          |           |  |
| VCCCCY1EH102J  | 14- 26 | AB         |          | C         |  |
| VCCCCY1HH101J  | 14- 27 | AA         |          | C         |  |
| "              | 15- 6  | AA         |          | C         |  |
| VCCCCY1HH150J  | 15- 7  | AB         |          | C         |  |
| VCCCCY1HH180J  | 14- 28 | AA         |          | C         |  |
| VCCCCY1HH201J  | 14- 29 | AA         |          | C         |  |
| VCCCCY1HH220J  | 14- 30 | AA         |          | C         |  |
| VCCCCY1HH330J  | 15- 8  | AA         |          | C         |  |
| VCCCCY1HH561J  | 15- 9  | AB         |          | C         |  |
| VCCCTQ1HH332J  | 14- 31 | AC         |          | C         |  |
| VCCCTV1HH330J  | 14- 32 | AA         |          | C         |  |
| VCCCTV1HH471J  | 13- 6  | AA         |          | C         |  |
| VCEAGA0JW107M  | 14- 33 | AC         |          | C         |  |
| VCEAGA1AW226M  | 14- 34 | AB         |          | C         |  |
| VCEAGA1CW106M  | 14- 35 | AA         |          | C         |  |
| VCEAGA1CW107M  | 14- 36 | AC         |          | C         |  |
| VCEAGA1CW226M  | 14- 37 | AB         |          | C         |  |
| VCEAGA1CW476M  | 14- 38 | AB         |          | C         |  |
| VCEAGU1CW106M  | 15- 10 | AA         |          | C         |  |
| VCEAGU1CW476M  | 15- 11 | AB         |          | C         |  |
| VCEAJU1CW226M  | 13- 7  | AB         |          | C         |  |
| VCFYEG2EA223M  | 14- 39 | AE         |          | C         |  |
| VCFYJU2EA334K  | 14- 40 | AD         |          | C         |  |
| VCFYJU2EA824K  | 14- 41 | AE         |          | C         |  |
| VCKYCY1CB333K  | 14- 42 | AB         |          | C         |  |
| VCKYCY1CF104Z  | 14- 43 | AA         |          | C         |  |
| "              | 15- 12 | AA         |          | C         |  |
| VCKYCY1EB223K  | 15- 13 | AA         |          | C         |  |
| VCKYCY1EF104Z  | 14- 44 | AA         |          | C         |  |
| VCKYCY1HB102K  | 15- 14 | AA         |          | C         |  |
| VCKYCY1HB103K  | 14- 45 | AA         |          | C         |  |
| VCKYCY1HB331K  | 14- 46 | AA         |          | C         |  |
| VCKYCY1HF473Z  | 14- 47 | AA         |          | C         |  |
| VCKYTV1EB104K  | 13- 8  | AA         |          | C         |  |
| VCQYNA1HM473K  | 14- 50 | AA         |          | C         |  |
| VCQYNU1HM332J  | 14- 49 | AC         |          | C         |  |
| VCQYNU1HM473K  | 14- 48 | AB         |          | C         |  |
| VCQYNU1HM683J  | 14- 51 | AC         |          | C         |  |
| VHD10E1////-1  | 14- 57 | AA         |          | B         |  |
| VHD1SS355//--1 | 14- 56 | AB         |          | B         |  |
| VHDDAN202U/-1  | 13- 9  | AB         |          | B         |  |
| "              | 14- 52 | AB         |          | B         |  |
| VHDDAP202K/-1  | 15- 15 | AB         |          | B         |  |
| VHDDAP202U/-1  | 13- 10 | AB         |          | B         |  |
| "              | 14- 53 | AB         |          | B         |  |
| VHDDSS133//--1 | 14- 54 | AA         |          | B         |  |
| VHDEK14////-1  | 14- 55 | AE         |          | B         |  |
| VHDRB501V40-1  | 14- 58 | AD         |          | B         |  |
| VHEHZ27-1//--1 | 14- 59 | AB         |          | B         |  |
| VHERD2.7EB2-1  | 14- 60 | AB         |          | B         |  |
| VHERD4.3EL3-1  | 14- 61 | AB         |          | B         |  |
| VHi1816-6//--1 | 14- 82 | AZ         |          | B         |  |
| VHi27C08001QS  | 14- 1  | BA         | N        | B         |  |
| VHi74LS244NS1  | 15- 19 | AH         |          | B         |  |
| VHi74LS245NS1  | 15- 20 | AF         |          | B         |  |
| VHi74VHC11///  | 14- 83 | AF         |          | B         |  |
| VHiAT24C16N//  | 15- 16 | AL         |          | B         |  |
| VHiBU4051BCF/  | 14- 62 | AF         |          | B         |  |
| VHiBU4053BCF1  | 14- 63 | AE         |          | B         |  |
| VHiCG46533175  | 14- 65 | BA         |          | B         |  |

| PARTS CODE     | NO.    | PRICE RANK | NEW MARK | PART RANK |  |
|----------------|--------|------------|----------|-----------|--|
| VHiCGS410//--1 | 14- 64 | AU         |          | B         |  |
| VHiHD4074344/  | 13- 11 | AX         |          | B         |  |
| VHiHY18164CSJ  | 14- 66 | AZ         |          | B         |  |
| VHiLC8213K/-1  | 14- 67 | AZ         |          | B         |  |
| VHiLM311//--1F | 14- 68 | AD         |          | B         |  |
| VHiLM386M//--1 | 14- 69 | AE         |          | B         |  |
| VHiLZ9FH19///  | 14- 70 | AV         |          | B         |  |
| VHiMC34063P-1  | 14- 71 | AN         |          | B         |  |
| VHiNJM084M/-F  | 14- 72 | AH         |          | B         |  |
| VHiNJM431U/-1  | 13- 12 | AF         |          | B         |  |
| VHiNJU6355E-1  | 14- 73 | AM         |          | B         |  |
| VHiNS32FX164/  | 14- 75 | BG         |          | B         |  |
| VHiNSFX200-25  | 14- 74 | BG         |          | B         |  |
| VHiTC7SH08FU1  | 15- 17 | AE         |          | B         |  |
| VHiTL431CLP-2  | 14- 76 | AG         |          | B         |  |
| VHiULN2003ANS  | 14- 77 | AE         |          | B         |  |
| VHiUSS-725///  | 15- 18 | BD         |          | B         |  |
| VHiW166G/////  | 14- 81 | AT         | N        | B         |  |
| VHiW24257A12J  | 14- 78 | AN         |          | B         |  |
| VHiW2465S70LL  | 14- 79 | AW         |          | B         |  |
| VHP1LHLE-002A  | 13- 13 | AC         |          | B         |  |
| VHPGP1A71A1-1  | 8- 15  | AG         |          | B         |  |
| VHPPC814///-1  | 14- 84 | AE         |          | B         |  |
| VHPPC817///-1  | 14- 85 | AF         |          | B         |  |
| VHVRA391PV6-1  | 14- 86 | AE         |          | B         |  |
| VHVTNR5V471K/  | 14- 87 | AD         |          | B         |  |
| VRD-HT2EY330J  | 14- 88 | AA         |          | B         |  |
| VRD-HT2EY392J  | 14- 89 | AA         |          | C         |  |
| VRD-HT2EY4R7J  | 14- 90 | AA         |          | C         |  |
| VRD-HT2HY101J  | 14- 91 | AA         |          | C         |  |
| "              | 15- 21 | AA         |          | C         |  |
| VRD-HT2HY153J  | 14- 92 | AB         |          | C         |  |
| VRD-HT2HY4R7J  | 14- 93 | AA         |          | C         |  |
| VRD-HT2HY561J  | 14- 94 | AA         |          | C         |  |
| VRS-CY1JD000J  | 14- 95 | AA         |          | C         |  |
| VRS-CY1JD100J  | 14- 96 | AA         |          | C         |  |
| VRS-CY1JD101J  | 14- 97 | AA         |          | C         |  |
| VRS-CY1JD102J  | 14- 98 | AA         |          | C         |  |
| "              | 15- 22 | AA         |          | C         |  |
| VRS-CY1JD103J  | 14- 99 | AA         |          | C         |  |
| "              | 15- 23 | AA         |          | C         |  |
| VRS-CY1JD104J  | 14-100 | AA         |          | C         |  |
| VRS-CY1JD105J  | 14-101 | AA         |          | C         |  |
| VRS-CY1JD106J  | 14-102 | AA         |          | C         |  |
| VRS-CY1JD121J  | 14-103 | AA         |          | C         |  |
| VRS-CY1JD122J  | 15- 24 | AA         |          | C         |  |
| VRS-CY1JD123J  | 14-104 | AA         |          | C         |  |
| VRS-CY1JD152J  | 15- 25 | AA         |          | C         |  |
| VRS-CY1JD181J  | 14-105 | AA         |          | C         |  |
| VRS-CY1JD182J  | 14-106 | AA         |          | C         |  |
| VRS-CY1JD203J  | 15- 26 | AA         |          | C         |  |
| VRS-CY1JD220J  | 15- 27 | AA         |          | C         |  |
| VRS-CY1JD221J  | 14-107 | AA         |          | C         |  |
| VRS-CY1JD222J  | 14-108 | AA         |          | C         |  |
| VRS-CY1JD223J  | 14-109 | AA         |          | C         |  |
| VRS-CY1JD240J  | 15- 28 | AA         |          | C         |  |
| VRS-CY1JD330J  | 14-110 | AA         |          | C         |  |
| VRS-CY1JD331J  | 14-111 | AA         |          | C         |  |
| VRS-CY1JD332J  | 15- 29 | AA         |          | C         |  |
| VRS-CY1JD333J  | 14-113 | AA         |          | C         |  |
| VRS-CY1JD390J  | 14-112 | AA         |          | C         |  |
| VRS-CY1JD472J  | 14-114 | AA         |          | C         |  |
| VRS-CY1JD473J  | 14-115 | AA         |          | C         |  |
| VRS-CY1JD511J  | 14-116 | AA         |          | C         |  |
| VRS-CY1JD512J  | 14-117 | AA         |          | C         |  |
| VRS-CY1JD562J  | 14-118 | AA         |          | C         |  |
| VRS-CY1JD750J  | 14-119 | AA         |          | C         |  |
| VRS-CY1JD821J  | 14-120 | AA         |          | C         |  |
| VRS-CY1JD822J  | 14-121 | AA         |          | C         |  |
| VRS-CY1JD911J  | 14-122 | AA         |          | C         |  |
| VRS-TP2BD000J  | 13- 14 | AA         |          | C         |  |
| VRS-TS2AD000J  | 14-124 | AA         |          | C         |  |
| VRS-TS2AD101J  | 13- 15 | AA         |          | C         |  |
| VRS-TS2AD102J  | 13- 16 | AA         |          | C         |  |
| VRS-TS2AD103J  | 13- 17 | AA         |          | C         |  |
| VRS-TS2AD105J  | 13- 18 | AA         |          | C         |  |
| VRS-TS2AD202J  | 13- 19 | AA         |          | C         |  |
| VRS-TS2AD203J  | 13- 20 | AA         |          | C         |  |
| VRS-TS2AD242F  | 13- 21 | AB         |          | C         |  |
| VRS-TS2AD272F  | 13- 22 | AA         |          | C         |  |
| VRS-TS2AD391J  | 13- 23 | AA         |          | C         |  |

[illegible]

**CAUTION FOR BATTERY REPLACEMENT**

- (Danish)                      ADVARSEL !  
Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.  
Udskiftning må kun ske med batteri  
af samme fabrikat og type.  
Levér det brugte batteri tilbage til leverandoren.
- (English)                      Caution !  
Danger of explosion if battery is incorrectly replaced.  
Replace only with the same or equivalent type  
recommended by the manufacturer.  
Dispose of used batteries according to manufacturer's instructions.
- (Finnish)                      VAROITUS  
Paristo voi räjähtää, jos se on virheellisesti asennettu.  
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan  
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden  
mukaisesti.
- (French)                      ATTENTION  
Il y a danger d'explosion s' il y a remplacement incorrect  
de la batterie. Remplacer uniquement avec une batterie du  
même type ou d'un type équivalent recommandé par  
le constructeur.  
Mettre au rebut les batteries usagées conformément aux  
instructions du fabricant.
- (Swedish)                      VARNING  
Explosionsfara vid felaktigt batteribyte.  
Använd samma batterityp eller en ekvivalent  
typ som rekommenderas av apparattillverkaren.  
Kassera använt batteri enligt fabrikantens  
instruktion.
- (German)                      Achtung  
Explosionsgefahr bei Verwendung inkorrektter Batterien.  
Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder  
vom Hersteller empfohlene Batterien verwendet werden.  
Entsorgung der gebrauchten Batterien nur nach den vom  
Hersteller angegebenen Anweisungen.

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